Evaluation of the Academic - Occupational Program, County of Leduc

Planning Services

Alberta
EDUCATION

Alberta
EDUCATION

Devonian Building, West Tower, 11160 Jasper Avenue, Edmonton, Alberta, Canada T5K 0L2

To the Reader:

Re: Evaluation of the Academic Occupational Program of the County of Leduc

A summary and complete evaluation are combined in this report which is being distributed to readers who are likely to have an interest in academic occupational programs.

The intention of this particular academic occupational program was to accommodate both educable mentally handicapped students and learning disabled students in a program that was separate from that of regular students with the primary objective of preparing students for the world of work.

While other such programs may have differing intentions and objectives, it is expected that the major findings and recommendations of this study will be useful to those responsible for developing and implementing academic occupational programs.

Sincerely,

H. I. Hastings

H. I. Hastings
Director
Planning Services Branch

EXECUTIVE SUMMARY

EVALUATION OF THE ACADEMIC OCCUPATIONAL PROGRAM

of the

COUNTY OF LEDUC

From September, 1981 to June, 1984

V.R. Nyberg
Department of Educational Psychology
The University of Alberta

September, 1984

In the fall of 1981 an external evaluation of the Leduc County A-O program was begun. The evaluation, to be carried out over a three year period, was to be conducted by the Department of Educational Psychology of The University of Alberta.

The evaluation was organized so as to include a study of the rationale, or philosophy of the special program, the intentions with respect to admission procedures, qualifications of staff, special facilities and arrangements for the students, courses taught, instructional procedures and qualities of the students at the end of each year of the program. The plan was to gather data through interviews with administrators and with teachers, on-site observations including visits to classes, achievement tests, measures of attitude toward the world of work and toward their school subjects, a measure of self concept, and a questionnaire for students and one for parents.

The next step was to make comparisons to determine the extent to which the progam plans coincided with what was actually taking place. The general idea, then, was to see if the program was operating as intended.

An additional phase was introduced at this point. This involved comparing the various aspects of the Leduc A-O program with those of another similar program. The one chosen was the group of special arrangements in operation in Sturgeon School Division. Officials of the Division were very cooperative, and they agreed to permit their program to serve as a standard for comparison. This meant that the same procedures regarding tests, visits and interviews would be carried out in the Namao Junior High School, where the Improvement Program was in effect, and in Sturgeon Composite High School, where the A-O program was operative. Both of these schools are located at Namao.

It was realized that the Leduc county program and the Sturgeon division program were not identical; however, no two programs are entirely so. The Sturgeon program has been in existence for approximately ten years, as opposed to four years for the Leduc program. No special funding was provided by Alberta Education for the Sturgeon program until the 1983-84 school year while Leduc's received special funding from the outset. The two programs were designed for somewhat different purposes, also. At Leduc the intention was to accommodate both educable mentally handicapped students and learning disabled students in a program that was separate from that of regular students with the primary objective of preparing the students for the world of work. At Namao the primary objective was to give special attention to the students so that they could return to the main stream of high school education. Preparation for an occupation was a secondary consideration. As a consequence, the general ability level of the students in the special classes at Namao was higher than that of the students in the Leduc A-O program. Fortunately, while

there were substantial differences, there was also considerable overlap that made comparisons a reasonable undertaking.

The evaluation was not intended to deal with matters of costs nor to judge the worth of each of the subjects offered as part of the special program. Also, there was to be no evaluation of the Sturgeon School Division programs; instead, these were to be used as a standard against which the various aspects of the Leduc program were to be compared.

Most of the classroom visits for the purpose of observation and testing were carried out by graduate students in Educational Psychology. Three students were involved, one during each of the three years of the evaluation.

The evaluation was completed in September, 1984.

The major findings were as follows:

1. The strength of the A-O program lies primarily in the quality of its teachers. All of them are especially dedicated and enthusiastic. They exhibit a genuine interest in their students, cooperate with one another in matters of teaching, in dealing with problems, and in group activities, and are not reluctant to put extra time and energy into their work.

2. Morale of the staff is excellent. This is in no small part due to the efforts of members of the central office staff and of the administrators in the schools. It is unusual to see administrators and supervisors completely familiar with the program and the facilities, and with the individual characteristics of every student in the program.

3. Considerable effort has gone into building the A-O program, including setting up special courses, assembling necessary materials and equipment, organizing special activities, and placing students in work experience situations.

4. Teachers participate in decision making regarding program development, special projects, requisitioning materials, and teaching procedures. This has made the program more meaningful to the teachers, and has made them more appreciative of its goals and of why the various policies exist.

5. An excellent manual has been prepared for use in Leduc county. The philosophy and goals are clearly stated, and in addition there is a wealth of information with respect to detailed objectives, course content, special materials and instructional activities.

6. There is excellent communication and cooperation between staff members involved with the A-O program at Leduc and at Warburg. This situation is, to a considerable extent, the result of the monthly inservice meetings. These meet-

ings bring together the A-O staff members from Leduc and Warburg, and the central office personnel responsible for the special program.

7. The A-O program has a strong Special Education flavor, in that the interests of the students are paramount, rather than a dominant flavor of passing or failing according to vocational standards. There is evidence that a Special Education emphasis is superior to a vocational emphasis (Gillet, 1981, and Miller & Schloss, 1982).

8. The program seems to be improving, especially with respect to achievement of the students, their attitudes, and classroom atmosphere. The staff members are adapting to their respective roles in the new program. They are more confident in what they are doing in 1984 than they were in 1981, and this is reflected in smoother running classes.

9. The academic achievement of the students is satisfactory. There is generally a gain of approximately two thirds of a grade level each calendar year. Considering that the students have a history of low achievement, and that they are spending much time in the vocational area, this is a reasonable level of progress.

10. The facilities are satisfactory considering the stage of growth of the program. There has been a steady improvement since the program was begun, and this improvement is expected to continue. In Leduc the disadvantages of having to convey the students to another school for some of the vocational courses are partly offset by the feelings of security and belonging resulting from the A-O students being housed in a separate building somewhat apart from the other buildings. In Warburg, because of the small number of A-O students, they are housed with the regular junior and senior high school students. This arrangement has the advantage of making the school's vocational and technical resources readily available to the A-O students and permitting more efficient deployment of staff.

11. The programs at Leduc and at Warburg are becoming different in character. This applies especially to the type of student being accommodated, the activities being undertaken, and the outcomes with respect to academic achievement.

12. Attitudes toward the A-O program are positive. This applies to the teaching staff, the students, and the parents.

13. Parents have a distinct role to play. They are informed fully of the nature of the program before a student is admitted, they are kept informed of students' progress, they are called upon for assistance when students have unexplained absences and when assignments are neglected, and they are consulted immediately when serious problems develop.

14. There are some problems in using the Sturgeon School Division programs as standards for comparison. The two programs are substantially different.

15. Self concept of the A-O students is at least as good as that of the comparable group in Sturgeon School Division.

16. Average attendance of the students is below what might be expected. It is noted, however, that students' attendance is lowest during their first year in the program and steadily improves as they progress.

17. The County of Leduc A-O program generally compares favorably with the programs in operation in Sturgeon School Division. This applies to program development, achievement standards, attitudes of students and parents, and self concept. Overall attendance seems to be better in the Sturgeon system. It must be remembered that the two school systems developed their programs for different purposes and for students with different sets of problems.

The final step of the evaluation was to make recommendations regarding the A-O program. These are set forth below.

1. Support by way of funding of the Leduc A-O program should be continued.

2. The program should be allowed to continue in its present form and to grow and evolve so as to meet the changing needs of the students and the changing conditions in the school system. Any movement to make a substantial change should be resisted. Any program, locally developed, that is working well, should not be changed merely for the sake of having to adapt to externally imposed regulations.

3. The Special Education emphasis, mentioned in #7 of the findings listed above, should be preserved. A shift to standards expected of regular students in vocational subjects might well destroy the A-O program as it now exists.

4. While the present monthly inservice meetings are of value, and should definitely be continued, teachers should be encouraged to participate in some inservice education of a more formal nature. Study in the area of dealing with learning disabled students would be particularly useful. The possibility of providing special courses at Leduc by the Department of Educational Psychology of The University of Alberta, should be investigated.

5. A testing program should be organized for the A-O classes to monitor the achievement, attitudes and personality traits of the students.

6. There should be a continuing effort to increase the supply of special materials for the A-O classes. In particular, there should be an increase in the supply of the equipment that is heavily used.

7. In the school located in Leduc city, increased access to automotives shops, business machines, food labs. and the like, is needed. This will probably come if the A-O section becomes housed in the new senior vocational high school. In the Warburg school the small size of the A-O group dictates that any new equipment must be of use to regular students as well as to A-O students.

8. The programs at Warburg and Leduc should be monitored closely in order to determine the extent to which they differ from one another. The causes of the differences and the desirability of the differences, that appear to be increasing as time passes, should be studied.

9. The matter of attendance should be examined with a view to improving the situation during the students' first and second years in the program.

EVALUATION OF THE ACADEMIC OCCUPATIONAL PROGRAM

of the

COUNTY OF LEDUC

From September, 1981 to June, 1984

V.R. Nyberg
Department of Educational Psychology
The University of Alberta

September, 1984

ACKNOWLEDGEMENTS

Steering Committee

Dr. Wesley Eddy, Educational Consultant, Planning and Research Services Branch, Alberta Education (Chairman).
Mrs. Marjorie Bilar, Trustee, County of Leduc No. 25.
Mr. A. Day, Associate Director of Curriculum, Alberta Education.
Mr. Dan Ewasiuk, Director of Support Programs, Compensatory Education, Alberta Education.
Dr. Neil Gannon, Superintendent of Schools, Leduc Public School District No. 297.
Mr. Walter Goos, Director of Guidance and Special Education, County of Leduc No. 25.
Miss Dorothy Lowrie, Trustee, Board of the City of Leduc Public School District No. 297.
Mr. Robert L. MacDonald, Superintendent of Schools, County of Leduc No. 25.
Mr. Matt Shykora, Educational Consultant, Edmonton Regional Office, Alberta Education.

Others Who Assisted

Dr. B. Daoust, Acting Director of Special Services, Sturgeon School Division No. 25.
Mr. W.J. Heppler, Superintendent of Schools, Sturgeon School Division No. 24.
Mr. G. Honish, Principal, Namao School.
Mr. Norval Horner, Principal, Sturgeon Composite High School.
Mrs. J. Isbister, Vice-Principal, Sturgeon Composite High School.
Dr. Joyce Krysowaty, Remedial Specialist, County of Leduc No. 25.
Mr. Norm Majeski, Principal, Leduc Junior High School.
Mr. Ron Mann, Principal, Warburg High School.
Mr. G. Schick, Principal, Namao Junior High School.
Mr. Steve Sieben, Director of Special Services, Sturgeon School Division No.24.
Mr. Craig Spencer, Vice-Principal, Namao Junior High School.
Mr. Greg Stewart, Vice-Principal, Leduc Junior High School.

The assistance of the above-named people is gratefully acknowledged.

Special thanks are extended to my three willing and capable research assistants: Mr. Fred French (1981-82), Mr. Chris Williams (1982-83) and Mrs. Beth Kossowan (1983-84).

Warm thanks go to the teachers involved with the special programs at Leduc, Warburg, Namao Junior High School, and Sturgeon Composite High School. Their helpful cooperation was appreciated.

V.R. Nyberg
September, 1984.

TABLE OF CONTENTS

		Page
CHAPTER 1:	INTRODUCTION	
1.1.1	Origins of the Leduc Academic Occupational (A-O) Program	1
1.1.2	Origins of the Namao and Sturgeon Programs .	2
1.2.1	Evaluating the A-O Program	3
CHAPTER 2:	EVALUATION PLAN	
2.1.1	Stake's Model	4
2.1.2	Application of the Model	4
CHAPTER 3:	SOURCES OF DATA	
3.1.1	Canadian Achievement Tests	7
3.1.2	Attitude Measures	7
3.1.3	Self Concept Measure	9
3.1.4	Other Data	9
CHAPTER 4:	PROCEDURES	
4.1.1	Testing Schedule	10
4.1.2	Methods of Gathering Data	12
4.1.3	Analysing Data	12
CHAPTER 5:	RESULTS	
5.1	RATIONALE	
5.1.1	Philosophy of the Leduc A-O Program	16
5.1.2	Philosphy of the Sturgeon Program	16
5.2	INTENTS	
5.2.1	Selection Procedures	18
5.2.2	Staff Characteristics	19
5.2.3	Planned Program and Special Arrangements ...	19
5.2.4	Expected Outcomes	22
5.3	OBSERVATIONS	
5.3.1	Selection Procedures Employed	24
5.3.2	Teacher Characteristics	24
5.3.3	Program and Special Arrangements Employed ..	25
5.3.4	Achievement Outcomes	27
5.3.5	Attitude Outcomes	33
5.3.6	Self Concept Outcomes	39
5.3.7	Attendance Outcomes	39
5.3.8	Outcomes for Student and Parent Questionnaires	39
5.3.9	Discipline	46
5.4	STANDARDS	
5.4.1	Selection Procedures	47

Page

5.4.2 Staff Characteristics 48
5.4.3 Programs and Special Arrangements Employed . 48
5.4.4 Outcomes 49
5.4.5 Discipline 50

5.5 JUDGMENTS
5.5.1 Rationale and Intents 50
5.5.2 Transactions 50
5.5.3 Outcomes 51
5.5.4 Conclusion 51

CHAPTER 6: FINDINGS AND RECOMMENDATIONS

6.1 SUMMARY OF FINDINGS 53
6.2 RECOMMENDATIONS 55

APPENDIX A

QUESTIONNAIRE FOR STUDENTS 58
QUESTIONNAIRE FOR PARENTS 61

APPENDIX B

A-O Inservice Activities 65

CHAPTER 1: INTRODUCTION

1.1.1 Origins of the Leduc Academic Occupational (A-O) Program

In order to avoid confusion caused by different meanings attached to the term Academic Occupational Program, it must be made clear that in the County of Leduc the special program was intended for BOTH the educable mentally handicapped (EMH) students and the learning disabled (LD) students.

The Leduc A-O program might be considered to be a direct result of two separate causes. First was the matter of accommodating the two groups of slow learners, as mentioned above, in Edmonton schools. Prior to the 1980-81 school year the A-O students had been bussed daily from all areas of the County of Leduc to the W.P Wagner School or to the L.Y. Cairns School. As time went on it became evident that there were elements of dissatisfaction that were causing increasing complaints from parents. First was the matter of time spent on the busses. Students from the extreme west end of the county boarded busses at about 6:30 A.M. and did not return home until approximately 5:30 P.M. Parents were disturbed, and with reason, over the long and exhausting days put in by the students, some of whom were only 13 years of age. Another matter of contention was the increasing problem of accommodation. The Edmonton System needed the space for their own students, therefore it was often necessary to wait-list some of the students because of lack of space.

Another aspect was the concern felt by parents for the effects of the "big, bad city" on innocent country children. The two Edmonton schools were growing in size, and perceived to be more impersonal. There were a few horror stories about school grounds being infested with pushers and other subhuman forms, making it unsafe especially for visiting students. Linked with this was the growing concern for the home communities. School administrators are well aware of the firm bond that exists between a small community and its school. These small communities are faced with the continuing danger of withering away as people are attracted elsewhere, and as business is squeezed out by competition from the larger centres. One of the vitalizing features of the community is the school, with its daily influx of students from the surrounding countryside and its various activities that affect the immediate area. Any action that tends to reduce the school population will face strong opposition from the local people. Bussing A-O students to Edmonton was seen as another erosion of the local school and therefore of the community.

The second root cause of the establishment of an A-O program was a survey, in 1977, of high school interests conducted to investigate the extent of need for vocational education centres in the county. One of the conclusions was that the most urgent need was to accommodate, within the county, the approximately 120 students being bussed daily to Edmonton. A special committee, The Educational Needs Committee, was formed in 1978 for the specific

purpose of studying the needs of these students. A proposal, put forth in 1979, was refined and became the basis for the A-O program. The proposal was based on the idea that new courses (as opposed to modified courses) were needed, that special facilities and instructional materials were necessary, and that a special staff had to be engaged to do the teaching. By March, 1980, a new program had been constructed, and in the fall of 1980 it went into operation.

Two centres were involved, Leduc at the eastern end of the county, and Warburg at the western end. While the number of candidates was not more than could be taught in one centre, the problem of distance remained unless a second centre was opened. It was realized that the result was not ideal in that the Leduc A-O centre was much larger than the one at Warburg; however, this could not be avoided because of the difference in population density in the western and eastern ends of the county.

1.1.2 Origins of the Namao and Sturgeon Programs

In the Sturgeon School Division there is, as of September, 1984, a Resource Room Program, an Improvement Program at the junior high school level, an A-O program that extends into both the junior and the senior high schools, and a Challenge Program. The Improvement Program grew out of the resource room program at the elementary level, and in turn the A-O program grew out of the Improvement Program. All of these special arrangements, with the exception of the Challenge program, were instituted to assist learning disabled students. The Challenge Program, which began in 1983, was developed specifically for EMH students.

The evaluation project reported here was concerned only with the Improvement Program and the A-O Program. No study was made of the Challenge Program.

The Improvement Program, developed for use in Namao Junior High School, went into operation in September, 1974. The special arrangements were based on a proposal formulated by a special committee to study the problem. It provided for students of minimum age 12 years to receive special instruction for a period of three years. In the fall of 1977 Sturgeon Composite High school was opened, and it included accommodation for A-O students. Prior to 1974 the learning disability students and the educable mentally handicapped students had been bussed into Edmonton, primarily to H.A. Gray Elementary-Junior High School, to W.P. Wagner High School and to St. Joseph High School. The arrangement was considered satisfactory except for the transportation problem. Students had to spend long periods on the bus, both morning and evening, and the problem of using busses on regular routes to gather the special program students for the trip to Edmonton proved to be very difficult. In 1977, at the time of the introduction of a high school A-O program the Improvement Program was cut to two years by raising the minimum age to thirteen years.

In 1983 further changes were made. Improvement Program year 2 became A-O year 1, but it remained in the Junior High school. The program in Sturgeon Composite High School then was designated as A-O year 2.

No special funding from Alberta Education was received until the 1983-84 school year. In August, 1983, a proposal to Alberta Education was accepted resulting in funding for the A-O program operating in the two schools at Namao. In the fall of 1984 a third year of the A-O program was introduced at the high school.

1.2.1 Evaluating the A-O Program

The Leduc A-O program received special funding from Alberta Education, and the general policy of that department requires that an evaluation be conducted of any such program. Pursuant to this policy, the Department of Educational Psychology of the University of Alberta was contracted by the County of Leduc to conduct the evaluation. The assessment was to cover a three year period beginning in September, 1981. The stipulation was that the university department provide a research director and a research assistant to complete the task. The evaluation was to be conducted under the general direction of a steering committee made up of members from Alberta Education, from the county school administration staff, and from the county council.

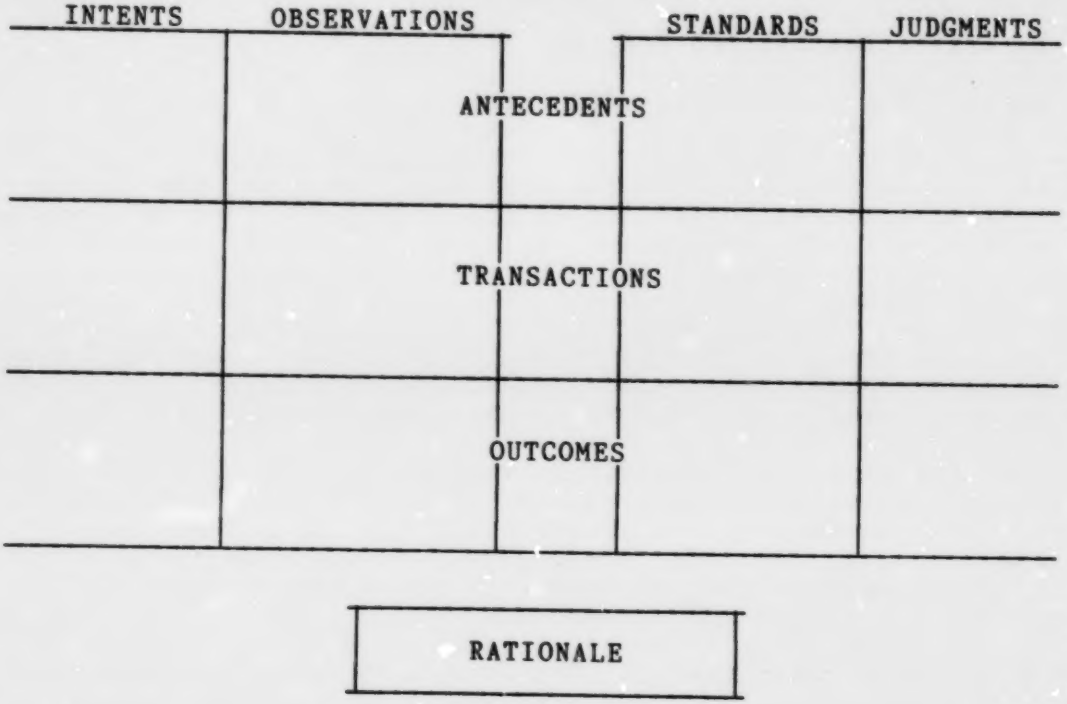
Early in the evaluation project it was decided to include, for comparison purposes, a program similar to the Leduc A-O program. It was realized that no two programs are exactly alike, however, it was thought the special programs conducted in the Sturgeon School Division were similar enough to serve as a "control" or to provide a standard for comparison.

It must be made clear that the Sturgeon School Division programs, based in Namao, were not being evaluated, but merely served as a base for making comparisons. After the decision to have a "control" group, the appropriate administrators from the Division were contacted, and they, as well as the staff involved with the special programs at Namao, agreed to cooperate in the evaluation project.

CHAPTER 2: EVALUATION PLAN

2.1.1 Stake's Model

At the outset of this project it was decided to employ Robert Stake's (1967) model for program evaluation. This model seemed appropriate because the evaluation involved many aspects of the program, and because the emphasis was on instruction, curriculum, and achievement. An outline of the model appears below.



2.1.2 Application of the Model

The evaluation consisted of gathering information from various sources as it applied to each of the cells of the model. For example, entries for the INTENTS column came primarily from the program manuals; the OBSERVATIONS column information came through visits to classes, discussions with staff, and from test results. Entries for the STANDARDS column came largely from the program manuals and from general statements on expectations, e.g. norms tables. JUDGMENTS statements were subjective, based chiefly on comparisons among OBSERVATION, INTENTS, and STANDARDS columns.

The original plan, drawn up in the summer of 1981, for providing information for the various cells is shown below. This plan was generally followed; however, as might be expected, circumstances dictated some deviations from the plan. The deviations tend to be minor in nature.

ANTECEDENTS

COLUMN	INFORMATION	SOURCES
Intents	Admission criteria Special qualifications of teachers	A-O manual Interviews with principals and program administrators
	Special facilities programs and materials	Interviews with supervisory staff, principals, etc.
Observations	Actual characteristics of students	Student records
	Actual characteristics of teachers	Teacher records
	Actual facilities, programs and materials used	Observation and interviews with principals
Standards	Existing conditions in comparable schools and classes, including control classes, and eligible students not in A-O program	Student records Summary records available in central office
Judgments	Compare "Intents" and "Observations" given above Compare "Observations" and "Standards"	Evaluators

TRANSACTIONS

Intents	Program of instruction as outlined Methods of instruction as outlined Methods of dealing with special problems	A-O manual, interviews with inner staff, principals and teachers
Observations	Programs actually taught Actual instructional methods Actual methods of dealing with problems	Observations of classes, teacher's lesson plans, and by interviews

COLUMN	INFORMATION	SOURCES
Standards	Programs and methods in comparable schools and in control classes	Data from other schools and from interviews
Judgments	Compare "Intents" and "Observations" Compare "Observations" and "Standards"	Evaluators
	OUTCOMES	
Intents	Goals and objectives of program	A-O manual
Observations	Achievement scores of students Scores on personality measures and attitudes measures Opinions of students and of parents	Scores on CAT battery, on personality and attitude measures, and responses to questionnaires
Standards	Achievement scores, personality scale scores, and attitude scores in comparable classes	Scores on tests for control groups, and for similar groups Employers
Judgments	Compare "Intents" and "Observations" Compare "Observations" and "Standards"	Evaluators

Statements for entry in the RATIONALE cell came from the A-O manual and from guidelines established by Alberta Education.

Chapter 5 gives the entries, in detail, for each of the twelve cells of the evaluation table, as well as for the RATIONALE cell.

CHAPTER 3: SOURCES OF DATA

3.1.1. Canadian Achievement Tests

Information on achievement in the academic fields came through use of the Canadian Achieveament Tests (CAT). These tests, published by McGraw-Hill, were chosen for several reasons.

The battery is comparatively recent (1981), making it highly unlikely that the students had been exposed to these tests on previous occasions.

Subtests are available in the academic areas of interest in this study (Reading Vocabulary, Reading Comprehension, Spelling, Mathematics Computation and Mathematics Concepts).

There are tests at various levels so that academic achievement can be assessed from rather low to rather high levels; A "Locater Test" is available, to assist in deciding which level is appropriate for a particular student.

Subtest scores are transformed to "scale scores" which makes it possible to compare achievement of students regardless of the level of tests that they took, and which makes it possible to calculate meaningful statistical data for a group of students even though they wrote different levels of the test battery.

3.1.2 Attitude Measures

Attitudes of students were measured through use of two instruments developed and normed for use in Alberta.

Attitudes Toward the World of Work (Maguire and Romaniuk, 1979);

School Subjects Attitude Scales (Nyberg and Clarke, 1979).

The Attitudes Toward the World of Work produces the following fifteen subscores:

1. Preparation for School. High scores indicate a feeling that school provides adequate preparation for the world of work.

2. Interest and Variability in Jobs. High scores indicate a liking for interesting, challenging and varied jobs.

3. Diligence. High scores are indicative of a favorable attitude to hard work.

4. Laziness. High scores are related to wanting much in return for little effort.

5. Job Security. High scores indicate a preference for job security over other characteristics.

6. Positive Employer Characteristics. High scores indicate a view that employers are honest and fair people.

7. Independence. High scores are related to a preference for independence over other characteristics of a job.

8. Money. High scores go with the view that pay is the most important characteristic of a job.

9. Ambition. High scores relate to the opinion that striving for success is the most important consideration.

10. Locus of Control. High scores indicate a feeling that obtaining and succeeding in a job is a matter of luck, pull, etc.

11. Confidence in Succeeding. High scores show confidence in the ability to get a job and to succeed.

12. Negative Employer Characteristics. High scores are related to the feeling that employers are greedy and treat employees unfairly.

13. Social Relations. High scores show a preference for working with, and getting along well with, people.

14. Attitudes Toward Unemployment. High scorers view unemployment as highly undesirable.

15. General Attitudes Toward Earning a Living. High scores are related to a positive view toward earning one's own living.

It should be noted here that high scores do not always indicate a positive attitude. High scores in scale numbers 4, 10, and 12 would ordinarily be viewed as indicative of undesirable attitudes. High scores on scales 5, 7, 8 and 9 might be considered neutral as far as desirability is concerned, but this would depend to a greater extent on the biases of the observer.

Alberta norms are available for grades 9 to twelve, by sex (Maguire, Romaniuk and MacRury, 1983).

The School Subjects Attitude Scales produces three subscores as follows:

1. Evaluative. Increasing scores indicated a greater liking for a subject.

2. Usefulness. Increasing scores indicated an increasing feeling that the subject was useful in life.

3. Difficulty. Increasing scores indicated an increasing feeling that the subject was EASY.

In the School Subjects Attitude Scales higher scores are related to a more positive attitude in all three of the scales.

Alberta norms for grades five to twelve, by sex, are available (Nyberg and Clarke, 1983).

3.1.3 Self Concept Measure

Self concept as it applies to students was measured by the How I See Myself Scale, Elementary Form (Gordon, 1968). One of the primary reasons for choosing this scale was that an elementary form was available. Other scales considered (including the Secondary School Form) used language that was deemed too difficult for many of the students in the A-O program.

The How I See Myself Scale is purported to consist of five factors. These factors, along with a typical item for each, are given below.

1. Teacher-School. Teachers like me.

2. Physical Appearance. I like the way I look.

3. Interpersonal Adequacy. I seldom worry.

4. Autonomy. I enjoy individual projects.

5. Academic Adequacy. I do very well in school.

While the scale consists of five factors, the manual suggests that an overall score, only, be computed. That was the procedure followed in this study.

3.1.4 Other Data

Opinions of students regarding the A-O program and of parents regarding the A-O program were assessed through use of two questionnaires developed especially for this study. Copies are shown in Appendix A of this report. A total score was calculated for each questionnaire returned, and item data were also calculated.

Attendance for each student was recorded. Days attended for each of the three years of this study were noted.

Work experience grades, where applicable, were recorded. These scores were entered by the people who supervised the students on the various job sites. While approximately a dozen job-related variables were rated, a single overall score was computed for each student. The overall score is essentially a mean of all of the ratings.

CHAPTER 4: PROCEDURES

4.1.1 Testing Schedule

The general plan called for administration of tests and measures in the fall of each year, and again in the spring. For various reasons there were deviations from the plan. The most notable exception occurred in the fall of 1981, as the evaluation was getting under way. Owing to difficulties in obtaining materials, some of the fall testing was postponed until December or even January of 1982. Another exception occurred with respect to the student and parent questionnaires. These were administered in spring, only, as it seemed pointless to issue them before there had been any experience with the A-0 program. A final deviation from the original plan was made to avoid overexposing the students to tests. It was felt that the students, whose experiences with tests, especially achievement tests, generally had been negative, might be hostile toward repeated testing. For this reason, in the fall of 1983, only those students who were new to the A-0 program were tested. The other students had been tested only a few months earlier, and it was felt that for them the spring data could be applied to the fall as well.

The test schedule, then, as it was actually carried out, was as follows.

Fall 1981

- How I See Myself Scale
- Attitudes Toward the World of Work
- School Subjects Attitude Scales

December 1981, and January 1982

- CAT Vocabulary
- CAT Composition
- CAT Spelling
- CAT Mathematics Computation
- CAT Mathematics Application

Spring 1982

- CAT Vocabulary
- CAT Composition
- CAT Spelling

CAT Mathematics Computation

CAT Mathematics Application

How I See Myself Scale

Attitude Toward the World of Work

School Subjects Attitude Scales

Questionnaire for Students

Questionnaire for Parents

Fall 1982

CAT - 5 tests as before

How I See Myself Scale

Attitude Toward the World of Work

School Subjects Attitude Scales

Spring 1983

CAT - 5 tests as before

How I See Myself Scale

Attitude Toward the World of Work

School Subjects Attitude Scales

Questionnaire for Students

Questionnaire for Parents

Fall 1983

CAT - 5 tests as before, for students new to the program only

How I See Myself Scale, for new students only

Attitude Toward the World of Work, for new students only

School Subjects Attitude Scales, for new students only.

Spring 1984

CAT - 5 tests as before

How I See Myself Scale

Attitude Toward the World of Work

School Subjects Attitude Scales

Questionnaire for Students

Questionnaire for Parents

4.2.1 Methods of Gathering the Data

The matter of who would do the actual testing was left to the decision of each school. Generally, the first round of testing in the fall of 1981 (and December 1981 and January 1982) was conducted by the research assistant. An exception to this was the Attitude Toward the World of Work. It was found that many students had difficulty with the language of the instrument, and tended to have difficulty in concentrating after working several items. The instrument was therefore administered by teachers, usually in more than one session.

In the second round of testing two of the four schools opted to do the testing, and in the final round all of the schools administered the required tests. The reason for the change was generally that scheduling of the tests was simpler when conducted locally.

The student questionnaires were distributed to the students for completion on their own time in the spring of 1982. In subsequent end of year data gathering sessions the students were usually given class time to work on the instrument.

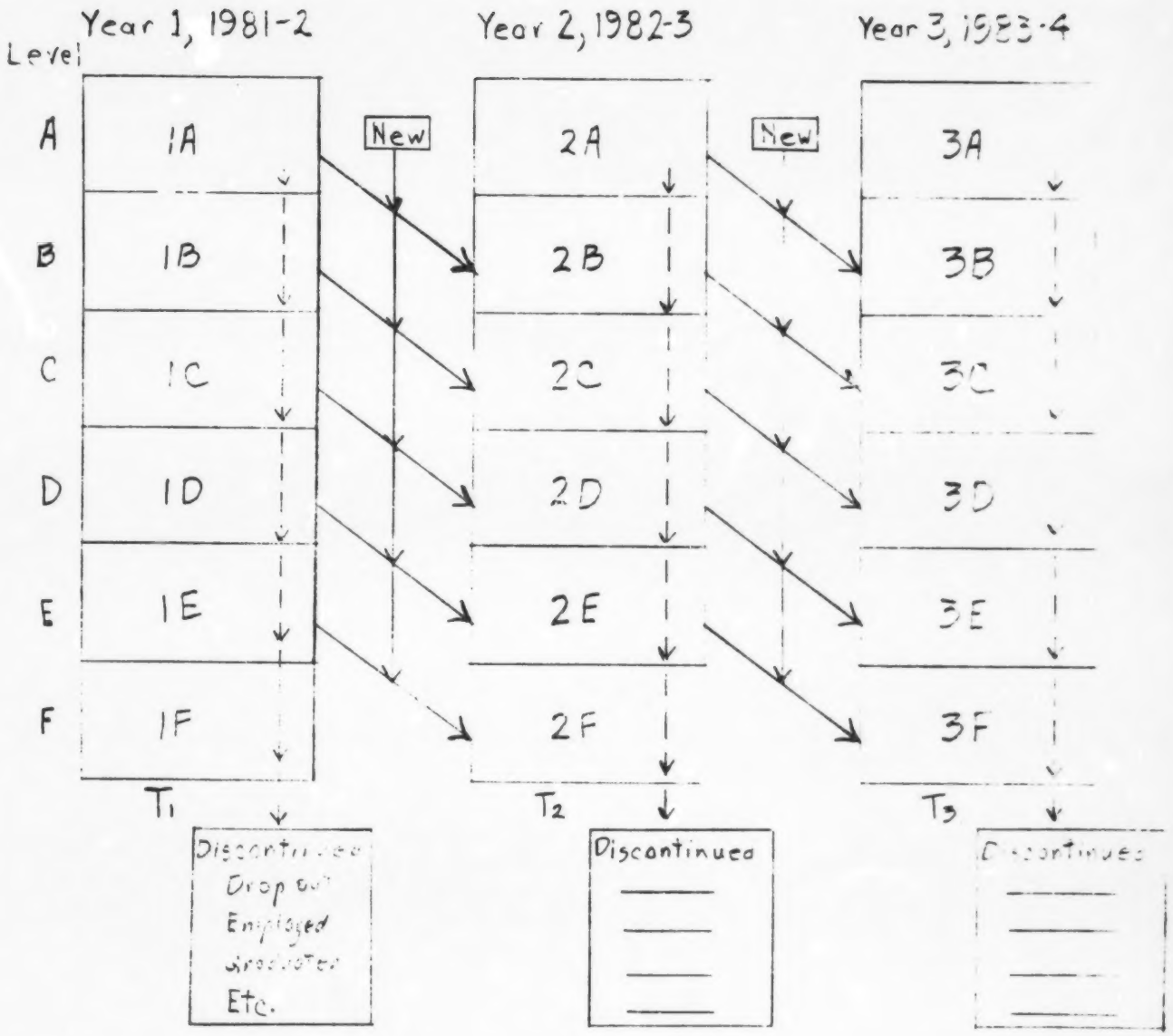
The questionnaires for parents in the spring of 1982 were sent to the homes via the students. Self addressed, postage prepaid envelopes were sent along with the questionnaires.

In all except the achievement tests assistance was given to the students, when requested, for completion of any items in the various instruments.

4.3 Analysing the Data

A general model was drawn up to assist in analysing the data. This model, shown on the next page, shows the complexity of the data, caused by such factors as new students being admitted at different levels of the program, students leaving to take jobs, and the different methods of classifying students in the different schools. For example, Leduc had seven levels, while Warburg had only one, but students stayed on for several years. The com-

FIGURE 1



MODEL FOR ANALYSIS OF DATA

parison groups at Namao were different again, with four levels in operation, three at Namao Junior High School, and one at Sturgeon Composite High School.

The general model was followed when it was practical, and when analyses produced informative results. In many cases the number of students in the subgroups were so small that means were not reliable, and in other cases breakdowns were unwarranted because differences did not exist; for example, differences by sex.

Another complicating factor was that students' names were not placed on the attitude scales, the self concept scale, nor on the questionnaires.

Data analysis was guided by three primary objectives.

1. Determine the status, in absolute terms, of IQ, achievement, attendance, self concept, attitudes and opinions regarding the special program.

2. Measure growth in achievement, self concept and attitudes over the years.

3. Assess the success of the program by determining the leaving status of the students at the end of each year.

Table 5.1 in Chapter 5 shows achievement scores and IQ statistics for the total group in each school over the three years. These figures give an indication of what trends are taking place as time goes on. Pronounced trends might be reflected from changes in such things as program, staff or admission procedures.

Table 5.2 shows IQ scores, CAT scores, and Work Experience grades for 43 students who were in the program continuously for three years commencing September, 1981. The main purpose of this table is to reveal the degree of academic growth that takes place as the students progress through the special program. The IQ scores are included to give information needed if comparisons are to be made. The Work Experience grades are intended to give an idea of effectiveness in a work situation. They should not be used for making comparisons because of the small numbers and because the students and job supervisors are different people from one year to the next.

Table 5.3 shows the leaving status of the students at the end of each year for the three years during which the evaluation was being conducted.

Tables 5.4, 5.5, 5.6, 5.7 and 5.8 give statistics on attitudes toward the world of work and towards school subjects. The purpose here was to see how the groups compared with one another, in the case of the world of work scales, and if the feelings were positive or negative in an absolute sense in the case of the attitudes toward the school subjects.

Table 5.9 shows the results of the How I See Myself Scale, a measure of the student's self concept; that is, how he feels about himself.

Table 5.10 gives attendance figures, which, in an indirect way, are linked to attitude toward school.

Table 5.11 gives mean responses to the student questionnaire, indicating how the students feel about the program as a whole. Table 5.12, which given an item analysis, reveals attitudes in specific areas. Tables 5.13 and 5.14 provide corresponding information for the questionnaire for parents.

CHAPTER 5: RESULTS

5.1 RATIONALE

5.1.1 Philosophy of the Leduc A-O Program

Establishment of the County of Leduc Academic Occupational Program was in keeping with the general statement of philosophy given by Alberta Education (1978):

> The ultimate aim of education is to develop the abilities of the individual in order that he might fulfil his personal aspirations while making a positive contribution to society.

A more specific statement of the philosophy of the program was put forth by the County of Leduc (c. 1980, p.3):

> The academic-occupational program is designed to provide an alternative form of education in accordance with individual capabilities and levels of functioning. This program will emphasize the acquisition of those academic, occupational and social skills which serve to enhance the knowledge, attitudes, habits, interests, self concept and employability of the student.

Five areas were identified for particular emphasis:

1. Practical academics.
2. Career and occupational awareness and experience.
3. Personal and social behavior.
4. Family and other interpersonal relationships.
5. School and community activities.

The statement of philosophy concluded with this sentence that outlined an integrated approach to instruction:

> Therefore, the classroom, the world of work, the home and the community all become a part of the learning environment.

5.1.2 Philosophy of the Sturgeon Program

The special programs at Namao Junior High School and Sturgeon Composite High School were also based on the general statement by Alberta Education given above. More specific statements indicate that the philosophical positions of the Improvement Program, at the Junior High School, and the Academic Occupational Program, at Sturgeon Composite High School, are somewhat different. The original pamphlet by Sturgeon School Division (1974) describing

the Junior High School Improvement Program, stated (p.1):

> The purpose of the program is to upgrade the basic skills of students who have a significant learning deficiency upon leaving elementary school, to improve their attitude toward school and to increase their enthusiasm for learning..... The ultimate aim of the program is to assist students to eventually return to regular programs at either the junior or senior high school levels.

The same statement appeared in a later version of the program description (1977).

The purpose, then, was primarily academic, that is, upgrading in academic skills to enable students to return successfully to regular school at the junior or senior high school level.

The Junior High School Improvement Program listed six needs to be given special attention (Pamphlet describing the Improvement Program, c. 1979):

1. Status and acceptance. This refers to the student's place within his or her peer group.

2. Independence. Emphasis here is on doing things by oneself.

3. Achievement. Success is school tasks is seen as an important component of self concept.

4. Experimentation. This refers to opportunities for students to experience differing situations so that they can find the fields that suit them.

5. Positive self-concept. Feeling good about oneself is an important step toward success.

6. Activity oriented learning. This refers to participating in activity as opposed to teacher directed activity.

The Academic Occupational Program, which operated in the Sturgeon Composite High School, only, until 1983, was a one-year program at the high school level. It was intended to provide upgrading in academic skills so that students could get on with completing a high school diploma. Also, attention was given to assisting students in the acquisition of skills needed to find a job.

In the fall of 1983 a revised A-O program went into operation. It now became a two year program such that the first year was offered in the junior high school and the second year was offered in the senior high school. The following statement appeared in the Sturgeon School Division's proposal that accompanied an application for special funding by Alberta Education (1983, p.1):

> The purpose of the Academic/Occupational Program is to pro-

> vide an alternative to help students who have serious difficulty in keeping up with their peers in regular school courses. With the approval of their parents these students may be placed in special classes designed to prepare them for direct entry into an occupation..

In the fall of 1984 a program guide described afurther revision that was put into effect (Sturgeon Composite High School, 1984). The most important aspect was that a third year of the A-O program became operational. It was located in the Sturgeon Composite High School. The Special Programs Guide, as it was called, further spelled out the philosophy in the description of the Challenge Program and of the Academic Occupations Program. The Challenge Program, intended for educable mentally handicapped students, seemed to emphasize fitting the students into the work place or into high school; that is, providing a modified program to give students useful work skills, and also to fit them into high school whenever possible. This is evidenced by the following statement in the Guide (1984, p.1):

> The Challenge Program is designed to offer present members of Opportunity Rooms a successful high school experience. The major goal of this program is to offer students with special needs the necessary skills that will allow each student to live and work as an individual. This program provides a continuum of subject matter, both academic and vocational, that will maximize the chances for the student's adjustment and success. Upon meeting all objectives the student may be advanced to another program for further training.

The A-O program has a different emphasis in that, after upgrading in mathematics and communication, the students will likely proceed with high school work, although there is attention given to preparation for the world of work.

It is important to note that students in the special programs at Sturgeon Composite High School take subjects for high school credit. This implies that the students are basically no different from regular high school students who are accumulating credit points towards goals such as apprenticeship or a diploma.

5.2 INTENTS

5.2.1 Selection Procedures

The criteria for selecting students for the Leduc A-O Program are stated in the manual on page 3. In order to be considered for admission to the program a student must:

1. be at least 13 years old as of September 1 of the year in which admission is sought;

2. have an IQ of 65 or higher, as determined through use of an individual test;

3. have an educational lag of at least two years in the core subjects;

4. express an interest in the program;

5. have written consent from his or her parents to enter the program.

On the basis of these criteria teachers may refer names of prospective students to the counsellor and principal. The names are then referred to the office of the Director of Guidance and Special Education. Appropriate members of the central office staff and school personnel then assess each case referred, after which there is a consultation with students and parents regarding the program.

5.2.2 Staff Characteristics

Criteria for selecting teachers for the Leduc A-O program are not stated in the manual but were ascertained through interviews with principals and supervisors of the program. The main characteristics are:

Instructional background appropriate to the needs of the teaching team, eg. language, shop;

Interest in teaching students who have difficulty with regular schooling;

A great deal of patience;

Ability to relate well to students;

Flexible, able to function in unstructured situations;

Some training in special education.

5.2.3 Planned Program and Special Arrangements

A special curriculum has been planned in detail for the Leduc A-O program. The general procedure in planning the curriculum was to drop the traditional compartmentalization resulting from teaching separate academic subjects, and to construct four new courses that cut across the various subject matters. These four courses are intended to meet the requirements of students who have a need to develop marketable skills for use in the near future, in addition to providing for needs associated with maturing in our society. Each course has five levels, corresponding to the five levels of the A-O program. The course names, along with brief content summaries, follow.

1. Career Planning

This is a special course intended to assist students in making appropriate career choices. Each of the five levels has a distinct area of emphasis. They are:

Motivation - self exploration, career awareness, etc.

Awareness - interest awareness, examining roles, etc.

Exploration - self evaluation, exploring interests, occupational clusters, etc.

Orientation - exploring specific occupations, getting and keeping a job, etc.

Specialization - experimenting with work stations, meeting job requisites, etc.

2. Modern Living

This course stresses development of personal and interpersonal skills and knowledge to prepare students for independent living. Some of the topics are: grooming, managing money, food preparation, shopping, safety, driver education, and social issues.

3. Occupations

In this course students have an opportunity to explore different occupations, and to participate in work stations. The areas explored are: industrial technology, domestic and social services, agriculture, and business.

4. Recreation

The purpose of this course is "to develop interests, skills and social behaviors for rewarding leisure time activities" (A-O program manual, p.12). Activities include athletics, games and potential hobbies, but depend upon interests of students and availability of instructors.

Special arrangements, activities, and resources are too numerous to be listed here. The A-O Program manual devotes 132 pages to listing resources, and suggesting activities. It is pointed out in the manual (p.23) that the lists are intended to be suggestive, and not prescriptive.

Some of the materials and resources are listed below. The items mentioned are those that tend to be mentioned several times.

Texts are suggested, especially in the "How to" area, such as:

Mechanics of Small Engines

BEST series
How to Become a Safe Worker
Ceramics
Welding
Drafting
Graphic Arts
Woodworking
Professional Restaurant Service

Workbooks such as these are available and suggested for use:

Using the Want Ads
Going Places with your Personality
Success at Work
General Math
Directions for the Future
Get Set for Work
Write for the Job
Working with Cash
The World of Careers
Mathematics for Electricity
Clothing Language - A Survival Handbook
Finding a Good Used Car
Reading a Newspaper
Biology Workshop
Planning Your Own Apartment
Real Life Reading

Kits such as the following are very frequently suggested:

Finding a Job
Pacemaker Vocational Readers
Job Box
Self Concept and Work
Janus Job Interview Kit.
First Jobs
Occupational Exploration
Shopping Game - The Art of Skillful Buying
Use Energy Wisely
Understanding Alcohol Use and Abuse.
Office Practice Activities
Poster Screen Printing
Automotive Engines
File and Find
Making the Most of Your Money
So You Want to Use Credit

AV materials suggested for use include video tapes, filmstrips and tape recordings such as the following:

Bread and Butterflies
At Least a Thousand Things to Do
Career Filmstrips
Me and Jobs

Dimensions for Living
Social Learning Curriculum (AV Kit)
Finding My Own Way
Survival Skills (AV Kit)
Complete Consumer
Teenage Runaways
Shop Lifting
Introductory Foods
Patchwork Quilting
Automotives 12
Building Construction
Sewing

The special materials and special arrangements for teaching are worthy of note. Some of these took considerable planning and a good measure of ingenuity. Those listed below are mentioned in the A-O Program manual in the section entitled Available Resources.

Guest speakers
Field trips
Organize a Career Day
Role play
Computer games
Participate in work experiences
Discussion of current issues
Prepare foods
Operate business machines
Design a landscape
Run simple computer programs
Ken Cook series on small engines
Facilities for arts and crafts
Beauty culture mobile
Hydroponics garden
Organize and operate a company

5.2.4 Expected Outcomes

Goals of the program are listed in the A-O Program manual (p.5) under three headings. A summary of these goals is given below.

1. Academic Goals

Develop skills in communication, computation, organization, and academic areas related to occupational and social functioning.

2. Occupational Goals

Develop in the following areas:

personal traits related to occupations.
understanding of the world of work
knowledge of careers

decision making skills related to world of work
realistic occupational goals
personal and interpersonal skills related to work
appreciation of continual learning related to a career
occupational skills through work experiences

3. Social Skills

Develop in the following areas:

positive self concept
positive interpersonal relationships
positive relationships on the job
understandings, skills, and behaviors of a good citizen

In addition to the goals, specific objectives are given for each of the three areas named above. These objectives follow logically from the broad goals; however, some examples are given below.

1. Academic Objectives

Communication skills
speaking and listening
following directions
reading with comprehension
writing with speed and accuracy

Computation skills
numeration, operations, and applications with respect to whole numbers, fractions, decimals, etc.

2. Occupational Objectives

Personal characteristics
favorable image with customers, co-workers, etc.
relating appropriately to superiors, co-workers, etc.
respect for authority
self confidence on the job

Career awareness

Legal rights and responsibilities on the job

3. Social-Personal Objectives

Positive Self Concept
self inventories
contributing meaningfully to personal growth and career choices, and experiencing success

Personal Management Skills
time management
leisure time activities

Independent Living Skills

Rights and responsibilities of citizenship
awareness of laws at three levels of government
awareness and participation in the democratic process
viewing the world as a global community

5.3 OBSERVATIONS

5.3.1 Selection Procedures Employed

Selection procedures for admitting students to the Leduc A-O program as described in the program manual were generally followed. There were a few exceptions:

In Warburg, one of the students had an IQ of 56, and another of 57, well below the stated minimum of 65.

In Leduc one student admitted in 1982 had an IQ of 64.

The exceptions were not made without considerable thought. The decisions to place these students in the A-O program were based on opinions that the students would profit more in the special program than in other situations. It was also realized that in the case of learning disabled students IQ scores are more subject to error than scores of regular students.

Selection procedures employed were impressive. Every case was considered on an individual basis, with the chief concern being what was best for the student. Parents were consulted, informed of the nature of the program, and made aware of the implications of withdrawing students from the regular school program.

5.3.2 Teacher Characteristics

Teacher characteristics were, to a large extent, as intended. The specialties were varied, so that the teaching team could cover the required instructional areas. The emphasis for the academic aspects seemed to be in language. Teacher backgrounds were as follows:

language arts;
industrial arts;
home economics;
educational opportunity.

None of the teachers had degrees in special education, but several had taken special education courses, some courses being taken after appointment to the A-O program. A few had been involved in A-O type programs in other systems.

An indication of the degree of interest in and enthusiasm for the program was the low staff turnover. Many of the teachers

who were in the program at its inception are still involved with instructing A-O students. Some of the teachers now divide their teaching time between regular classes and A-O classes because of such things as changes in policies regarding class size. Between the second and third years of the evaluation project there was virtually no turnover. While there was a reduction in staff, there were none that left and had to be replaced. As the 1984-85 school year begins, the staff from 1983-84 is virtually intact.

Interest and enthusiasm on the part of the teachers was also evident during discussions and interviews with the staff.

5.3.3 Program and Special Arrangements Employed

The intended courses were taught, and the intended content, outlined in the A-O manual, was followed rather closely. Special procedures, teaching materials and arrangements were used to a great extent. Some of those in common use and popular with staff and students are worth mentioning.

The most important arrangement made for the A-O classes was, of course, the assignment of teachers to the special classes. In Leduc, in 1983-84, there were seven homeroom teachers and several teachers involved on a part-time basis. In Warburg there were no full time teachers in the A-O program, but two teachers had home-room responsibilities for the students. There were several other teachers, generally in the vocational areas, who taught the special classes as well as regular school classes.

The largest single piece of equipment (if it can be called that) was the mobile unit used for teaching beauty culture. This unit was in place for half the school year in Leduc and the other half in Warburg, as intended. It was put to good use at both centres.

Another large system was the Ken Cook instructional materials used to teach maintenance of motorcyles and small engines. In Leduc the work stations connected with these materials were used on a booking basis, and were reserved well in advance for the entire school year. These materials were also popular in Warburg but were needed to a lesser degree because of the small number of students. The work stations were shared by the two schools, however, both had their own electronic modules for monitoring the engines.

The various machines associated with business education were also in heavy demand throughout the year. Machines were available in both schools.

The two schools had Apple II computers that were used a great deal. Instructional programs employed with this unit included writing, spelling, mathematics, word processing and a job search program entitled CHOICES. Various computer games of an educational nature were available. The games included such activities as word builders.

Other popular equipment included AV materials, of especial value for assisting with learning disabled students, a VCR, and a listening centre. Welding equipment at Caledonia school was available for use by the A-O students at Leduc, and for the Warburg students in the shop shared by A-O classes and regular classes. At Leduc materials for a mini-agriculture program were made available to a student who expressed interest in this area.

There were a number of special arrangements and activities designed to enhance the learning in the A-O classes. Upper level students were conveyed by bus to Caledonia school for three afternoons per week for hands-on shop experience. Several field trips for the Leduc group took place during the year, including visits to Fort Edmonton, Ukrainian Village, Alberta Vocational Centre, NAIT and a retreat was held in 1981-82 and again in 1982-83. Warburg students took part in some of these and as well organized several of their own, including ski trips (which were integrated with the regular classes), a bonspiel, a gold panning trip, observation of commercial ice fishing, and a work project trip to dig a basement.

Another interesting feature of the special provisions was the formation of companies. The Silver Streak company, in Leduc, and the AOK company in Warburg, constructed materials, sometimes for sale to the general public, and sometimes on a contract basis, for use in Early Childhood education. Another company was formed in Leduc that dealt in small wood products such as wine racks, key racks, etc. During one year lockers were constructed for one of the local clubs. The Home Economics classes were frequently involved in preparing edibles for sale at the school or in the community during special occasions. The Leduc classes prepared hot lunches for sale to students on a regular basis, A-O students operated the noon food concessions three days per week in Leduc, and every day in Warburg. The Leduc classes made their own year book, and the Warburg group helped in the design and sale of a community calendar. Proceeds from the various ventures were often used to finance activities such as field trips.

Leduc students participated in an achievement night in June of each year. Achievement night featured awards, along with a fashion show where students modelled their own dress creations. Other students had a chance to show results of their activities for the year. A similar event in Warburg was their A-O tea, held in the afternoon.

It must also be mentioned that a 4H club, based at the school, was in operation at Leduc. At the time of organization it was the only such arrangement in the province. During the achievement night products resulting from the 4H activities were judged and awards made.

Special books for improvement of reading and for improving general knowledge were used. The Janus Book Series were focussed

on specific areas, for example, the Banking Language book. The Real Life Series (a Scholastic publication) included books such as Real Life Math, a book displaying sample menus, etc. The New Age Books consisted of classics (eg. Pride and Prejudice) shown in comic book format.

The above-mentioned list of materials and arrangements is not exhaustive, but does cover the more important ones. There were many activities that operated on a casual basis, depending, probably on the special interests of the class (and the teachers).

The Warburg group did not access as much of the special materials as did the Leduc students because of the small number of people in the A-O program. However, the Warburg students had the advantage of having access to more materials available to the high school classes, such as business machines and shop equipment.

A variety of teaching strategies was employed at both Leduc and Warburg. The main features were division into small groups for activities, short discussions, hands-on experience and individual projects. Another technique that should be mentioned was the frequent use of contracts, whereby a student agreed to carry out tasks usually connected with a project. The student usually did most of the planning, but was assisted by the teacher in order to keep the proposed procedures at a realistic level.

Some teachers occasionally reverted to a lecture and note-taking procedure. As might be expected, some of the students became inattentive when they were unable to keep up with note taking.

5.3.4 Achievement Outcomes

Tables 5.1, 5.2 and 5.3, on the succeeding pages, apply to the degree of achievement of the students in the special programs. Some data on IQ scores of the students are also included. Figures for the "control" groups at Namao are given in this section in order to make comparisons easier.

Figures in Table 5.1 seem to indicate a few trends. First, over the three years there was a general increase in the grade equivalent scores. The exception was Warburg. It should be noted first that increases in scores should not be expected, because the students should be about the same each year. Stated another way, if changes do occur the group is changing and the reason must be sought. A general increase might be attributed to any of several causes. The selection practices might be changing, the average IQ of the students might differ from year to year, instructional procedures might change, and motivation of the students might change. Chance differences, also, must be considered. Indications are that the main factor operating here was the change in IQ. This was probably a matter of chance in the case of Warburg, where the groups were small. In Leduc the change was probably a matter of chance, but fluctuations caused by the newness of the program might also have been present. This seems

TABLE 5.1

A. Means & Standard Deviations of CAT Scores by school and year

	Yr. 1			Yr. 2			Yr.3		
Leduc	N	X	S	N	X	S	N	X	S	change
Reading V	69	5.60	2.5	60	5.75	2.4	54	5.39	2.6	-.21
Reading C	69	4.73	2.6	60	5.35	3.1	54	5.35	3.3	+.62
Spelling	69	5.27	2.8	60	4.99	2.5	53	5.15	3.0	-.12
Lang. M	69	4.58	3.0	60	5.07	3.1	53	5.19	3.0	+.61
Lang Ex.	64	4.19	2.6	60	4.63	2.5	53	4.69	2.6	+.50
Math Comp.	68	4.67	1.3	60	5.52	1.7	53	4.94	1.5	+.27
Math Con.	67	4.58	1.8	59	5.37	2.1	53	5.23	1.8	+.65
Ref. Sk.	60	4.67	2.5	-	-	-	39	5.68	2.4	+1.01
Overall Means		4.79			5.24			5.20		+.41
Warburg										
Reading V	22	5.61	2.4	19	5.64	2.6	17	5.16	2.6	-.45
Reading C	22	4.73	2.8	19	5.18	3.0	17	4.48	2.8	-.25
Spelling	21	4.71	2.2	19	4.15	2.1	17	4.12	2.8	-.59
Lang. M	21	6.00	3.4	19	5.76	3.2	17	4.08	3.1	-1.92
Lang. Ex.	21	4.66	2.5	19	4.26	2.4	17	4.14	2.6	-.52
Math. Comp.	21	5.48	2.4	19	5.01	1.5	17	4.83	1.6	-.65
Math. Con.	21	6.02	2.4	19	5.41	1.7	17	4.99	2.0	-1.03
Ref. Sk.	20	6.19	3.1	-	-	-	17	5.21	2.7	- .98
Overall Means		5.42			5.06			4.63		-.79
Namao/Sturgeon										
Reading V	64	6.25	2.3	72	6.56	2.3	86	6.67	2.2	+.42
Reading C	63	5.49	2.6	72	5.95	3.0	86	6.20	2.8	+.71
Spelling	65	5.89	3.0	66	5.90	2.9	85	6.28	3.1	+.39
Lang M.	21	5.41	3.0	54	6.36	3.5	84	6.68	3.3	+1.27
Lang. Ex.	21	4.97	2.6	53	4.99	2.5	87	5.61	2.3	+.64
Math. Comp.	60	6.79	2.1	72	6.58	1.8	89	7.40	1.6	+.61
Math. Con.	66	6.02	1.9	54	6.19	1.7	88	6.75	1.7	.73
Ref. Sk.	20	6.60	2.5	47	7.14	2.8	85	6.41	2.5	-.19
Overall Means		5.93			6.21			6.50		+.57

B. Mean IQ by School and Year

	1982		1983		1984	
School	N	Mean	N	Mean	N	Mean
Leduc	71	88.2	60	87.7	53	85.7
Warburg	24	84.9	19	81.0	17	84.6
Namao/Sturgeon	81	93.3	72	93.0	84	90.8

C. Number of Students of IQ 100 or Higher

School	1982	1983	1984
Leduc	7	5	5
Warburg	3	2	3
Namao/Sturgeon	20	15	10

TABLE 5.2

Mean Scores and IQ's for Students Continuing in the A-O Program for Three Years, Ending June, 1984

(N=43)

School	N	Mean	S.D.
Leduc	19	85.5	9.0
Warburg	10	83.1	14.3
Namao/Sturgeon	14	93.6	7.1

Leduc (N=19)

	Mean Grade Equivalents			
CAT Subtest	1982	1983	1984	Gain
Reading Voc.	4.71	5.29	6.00	1.29
Reading Comp.	3.88	5.31	5.04	1.16
Spelling	4.21	5.01	5.27	1.06
Language M.	4.12	4.51	5.02	.90
Language Ex.	3.27	4.44	4.33	1.07
Math. Comp.	4.09	4.65	4.57	.48
Math. Conc.	3.58	4.30	5.15	1.57
Ref. Skills	4.01	--	5.10	1.09
Overall Means	3.98	4.79	5.06	1.08

Work Experience: Mean Ratings			
	(N=5)	(N=15)	(N=16)
Cooperation	2.0	1.7	1.6
Initiative	3.0	2.1	2.4
Courtesy	1.8	1.5	2.0
Attention	2.4	2.1	2.0
Know. of Job	2.6	2.5	2.4
Accur. of Work	2.4	2.3	2.3
Work Accompl.	2.8	2.5	2.6
Work Habits	3.0	2.3	2.6
Adaptability	2.2	2.1	2.4
Pers. Appear.	1.8	1.5	1.9
Absent	1.8	2.0	1.9
Tardy	1.8	1.4	1.4
Gen. Satisfac.	3.0	2.6	2.7
Overall Means	2.4	2.0	2.2

TABLE 5.2 Continued

Warburg (N=10)

CAT Subtest	Mean Grade Equivalents 1982	1983	1984	Gain
Reading Voc.	4.47	5.20	5.42	.95
Reading Comp.	3.74	7.17	5.11	1.37
Spelling	3.15	3.47	3.46	.31
Language M.	5.70	5.40	5.47	-.23
Language Ex.	4.26	4.30	4.16	-.10
Math. Comp.	4.85	4.74	5.02	.17
Math. Con.	4.90	5.52	5.11	.21
Ref. Skills	4.53	--	4.70	.17
Overall Means	4.45	5.11	4.80	.35

Work Experience: Mean Ratings	(N=9)	(N=7)	(N=3)
Cooperation	1.8	1.4	1.8
Initiative	2.8	3.1	2.3
Courtesy	2.2	2.0	2.0
Attention	2.8	2.1	2.0
Know. of Job	2.9	3.0	2.0
Accur. of Work	2.8	2.4	2.5
Work Accompl.	3.0	3.0	2.0
Work Habits	2.7	2.9	2.0
Adaptability	2.6	2.4	2.5
Pers. Appear.	2.3	1.7	2.5
Absent	1.9	1.7	1.5
Tardy	1.6	1.3	1.8
Gen. Satisf.	3.0	2.9	3.0
Overall Means	2.5	2.3	2.2

Namao/Sturgeon (N=13)

CAT Subtest	Mean Grade Equivalents 1982	1983	1984	Gain
Reading Voc.	5.60	7.09	7.06	.46
Reading Comp.	4.55	5.79	4.89	.34
Spelling	6.53	6.29	6.45	-.12
Language M.	--	6.10	5.61	-.49
Language Ex.	--	5.93	5.40	-.53
Math. Comp.	6.13	6.60	8.25	2.12
Math. Conc.	4.99	6.50	7.45	1.46
Ref. Skills	4.53	7.81	5.18	.65
Overall Means	5.39	6.51	6.29	.49

TABLE 5.3

End of Year Status of Students

as of June 1982, 1983 and 1984

STATUS	LEDUC	WARBURG	NAMAO/STURGEON
June 1982			
Still in program	17	4	30
Transferred, moved, etc.	16	1	7
Graduated	2	8	8
To job	13	4	0
To regular school	7	1	3
Dropped out	12	4	31
Expelled	1	0	0
Not known	3	2	3
June 1983			
Still in program	25	4	57
Transferred, moved, etc.	13	1	1
Graduated	2	8	0
To job	5	3	0
To regular school	5	0	7
Dropped out	7	3	5
Expelled	0	0	2
Not known	3	0	0
June 1984			
Still in program	44	10	69
Transferred, moved, etc.	3	0	4
Graduated	2	2	0
To job	2	3	0
To regular school	2	0	5
Dropped out	1	2	2
Expelled	0	0	2
Not known	0	0	1

Note: "Graduated" in Leduc and Warburg meant completion of the A-O program, while in Namao/Sturgeon in meant graduation from high school.

logical in view of the fact that there is virtually no overall change between year 2 and year 3.

The Namao/Sturgeon group showed an almost perfect linear increase in overall standards of achievement. This was probably a result of the changes that have been made in the program, as noted in Section 1.1.2 of this report.

Another conclusion from the figures is that the grade equivalent scores in the Namao/Sturgeon programs were higher than those for the other schools, indicating that their program caters to more able students. This conclusion is borne out by the fact that the Namao/Sturgeon program was not intended for EMH students, and that the IQ's were generally higher for their students.

Table 5.2, which shows grade equivalent scores for students who were in the program for three years, is intended to show growth patterns. A clear picture emerged in the Leduc school; there was growth in every area. The largest gains were in communication skills, and in Math. concepts. The lowest was in Math. computation. This was consistent with statements regarding teaching practices at Leduc. The low gain in Math. computation was attributable to the fact that students were permitted to use calculators in their daily work (but not in the test, of course). This would explain the low gain in computation skills and the respectable gain in Math. concepts.

The figures for Warburg are difficult to interpret because of the small number of cases, and because the mean scores fluctuated from year to year. For example, Math. Concepts scores for the three years are 4.90, 5.52 and 5.11. The large standard deviation in IQ (14.3) as opposed to 9.0 in Leduc was probably a factor. A possible explanation was the difference in emphasis at Warburg. There seemed to be more stress on vocational subjects and occupations in Warburg than at Leduc. This might have been a result of the lower general ability of the Warburg students and a greater concern for giving them some saleable skills.

The Work Experience figures for Leduc and Warburg are of some interest, although firm conclusions are not easily reached. Comparisons from year to year and from school to school should not be made because the job supervisors (employers, in a sense) were different from year to year. Their marking standards no doubt varied considerably. Suffice it to say that, overall, the supervisors were mildly satisfied with the students. This conclusion seems warranted in view of the fact that a mean score of three would indicate a neutral attitude, and a score below that indicates a positive attitude.

The gains at Namao are not readily explained; however, it is not necessary to attempt an explanation here. The figures were intended for comparison purposes only. It should be mentioned that the gains for the Namao/Sturgeon group were spotty, and overall were rather modest. A pattern of this type might be expected

for LD classes where the main problem is with language.

The end of year status of students, presented in Table 5.3, makes it possible to assess the success rate of the programs. The figures for categories "Graduated," "To Job" and "To Regular School" indicate successful students, as defined by the program manual. The categories "Dropped Out" and "Expelled" represent failures; other categories represent neither succes nor failure. According to the figures, the success rate at Leduc was reasonably good, but at Warburg it was rather amazing. The high success rate at Warburg was probably a result of the small number of students. While it is possible to give more individual attention in small classes, this was not actually observed to occur. However, in smaller classes the teacher will automatically be closer to the students and will be able to gear the instruction to the problems, strengths and weaknesses of each student. The special activities and projects for the A-O students in Warburg no doubt were quite closely related to what the students could do, and wanted to do. Other possibilities are also present, such as the fact that Warburg is smaller and more remote than Leduc. The students might find fewer alternatives to school in a small centre.

5.3.5 Attitude Outcomes

Percentile ranks of the groups for the Attitude Toward the World of Work (see Tables 5.4, 5.5, 5.6 and 5.7) do not reveal anything startling. There were a few scores at the extremes, but no real pattern seemed to be present. For the group in Leduc school the variable Locus of Control was consistently the most negative, averaging in the top 10 percent. (The reader is reminded that this scale is reversed.) The remaining figures were not different from those that might occur for students in any other school in the province.

The Warburg students were most negative with respect to Locus of Control and Laziness. Other negative scores appeared, such as for Confidence as they apply to 1984 males, but values for the other years were quite normal.

Figures for the Namao group and the Sturgeon group showed no consistent patterns of negative scores. Locus of Control scores indicated a negative attitude, but not as strongly as the Leduc end Warburg groups.

The scores for the School Subject Attitude Scales (Table 5.8) showed a rather neutral attitude with respect to the Evaluative Scale for all schools in 1982. The attitudes tended to improve, especially in Leduc and Warburg, over the next two years. The results for the Usefulness scale tended to be most positive for all of the schools, with Difficulty near the neutral point of 24. It should be mentioned that Alberta students generally express positive attitudes toward school subjects when the School Subjects Attitude Scales are administered.

TABLE 5.4

ATTITUDE TOWARD THE WORLD OF WORK

LEDUC

Spring, 1982, 1983 and 1984

	1982 N=57		1983 N=50	1984 Jr.Male N=21		Jr.Female N=9		Sr. Males N=10		Sr. Females N=7	
	Mean	%i	Mean	Mean	%ile	Mean	%ile	Mean	%ile	Mean	%ile
Preparation	18.1	39	17.8	18.6	56	18.7	41	17.7	33	19.2	70
Interest	18.2	22	18.5	18.8	28	17.7	18	16.9	4	19.4	35
Diligence	20.4	29	20.1	21.3	56	20.7	26	20.3	62	20.9	33
*Laziness	11.8	74	13.0	12.1	82	10.1	57	12.5	79	12.3	87
Job Security	19.2	78	19.4	20.5	94	18.7	83	20.5	95	21.3	98
Pos. Employer Char.	18.8	81	18.8	20.0	95	17.2	32	19.6	92	18.1	71
Independence	17.3	44	17.7	18.5	72	15.6	12	16.6	9	18.2	71
Money	18.0	75	18.0	18.3	73	16.1	44	18.6	82	19.2	95
Ambition	16.1	63	17.1	17.1	83	14.9	45	16.4	60	16.1	78
*Locus of Control	15.9	92	16.7	15.2	87	15.0	91	16.9	96	16.0	94
Confidence	18.0	52	18.0	16.3	11	16.9	30	17.8	42	17.3	33
*Neg. Employer Char.	15.9	11	16.2	16.3	84	14.6	61	15.0	53	13.8	26
Social Relations	18.9	47	18.5	20.1	86	18.5	18	18.3	28	20.8	83
Unemployment	17.5	72	18.2	17.3	60	17.2	83	17.2	62	18.3	93
General	18.2	56	17.9	18.5	79	20.0	93	17.4	42	19.9	90

Note:

1. Grade 9 percentile norms were used for 1982, and junior 1984 groups. Grade 10 norms were used for the senior 1984 group.
2. 1982 percentiles are combined male and female percentiles.
3. For subject indicated thus (*), increasing scores indicate more negative attitudes.

TABLE 5.5

ATTITUDE TOWARD THE WORLD OF WORK

WARBURG

Spring, 1982, 1983 and 1984

	1982 N=18 Mean	%ile	1983 N=17 Mean	1984 All males N=11 Mean	%ile	1984 All females N=5 Mean	%ile
Preparation	18.6	55	18.8	18.2	51	16.9	12
Interest	18.8	35	18.1	17.7	9	17.9	10
Diligence	20.3	32	21.1	19.7	15	18.6	5
*Laziness	13.6	93	11.6	13.8	89	11.9	83
Job Security	19.0	69	19.8	19.5	85	17.6	40
Pos. Employer Char.	18.0	78	18.9	17.1	29	18.0	65
Independence	17.6	54	18.0	17.9	34	15.3	12
Money	17.8	65	18.5	17.5	49	16.5	55
Ambition	15.8	49	18.2	15.9	37	15.4	53
*Locus of Control	16.1	93	16.8	17.8	97	17.3	97
Confidence	18.1	62	18.4	14.3	3	17.0	24
*Neg. Employer Char.	15.4	77	14.9	15.7	72	15.8	78
Social Relations	17.9	18	19.5	18.5	35	18.8	22
Unemployment	18.3	78	18.5	17.4	67	17.1	85
General	18.2	70	19.4	17.1	35	17.6	29

Note:

1. Grade 9 percentile norms were used for 1982; Grade 10 for 1984.
2. 1982 norms are combined, male and female percentiles.
3. For subjects indicated thus (*), increasing scores indicate more negative attitudes.

TABLE 5.6

ATTITUDE TOWARD THE WORLD OF WORK

NAMAO JR. H. S.

Spring, 1982, 1983 and 1984

	1982 N=37		1983 N=52	1984 Jr. Males N=36		1984 Jr. Females N=14	
	Mean	%ile	Mean	Mean	%ile	Mean	%ile
Preparation	18.0	43	17.6	17.6	26	18.3	31
Interest	16.6	30	18.6	18.2	15	18.5	36
Diligence	20.5	30	20.8	20.2	25	20.5	21
*Laziness	12.7	85	11.5	11.8	79	11.9	87
Job Security	19.5	84	20.1	20.1	95	19.5	93
Pos. Employer Char.	18.7	81	18.6	17.4	36	17.5	41
Independence	17.7	57	17.2	17.1	31	16.8	42
Money	18.5	81	18.2	18.2	74	18.2	90
Ambition	16.8	81	16.1	17.0	82	16.4	87
*Locus of Control	16.5	94	16.4	14.8	84	16.5	97
Confidence	17.4	34	17.3	16.8	18	15.5	8
*Neg. Employer Char.	15.4	71	15.8	15.8	77	15.2	77
Social Relations	18.4	40	18.6	17.9	23	19.6	55
Unemployment	18.3	80	17.6	18.2	76	17.1	83
General	18.4	74	17.9	18.6	81	17.7	33

Note:

1. Grade 9 percentile norms were used for 1982 and 1984.
2. 1982 percentiles are combined male and female percentiles.
3. For subjects indicated thus (*), increasing scores indicate more negative attitudes.

TABLE 5.7

ATTITUDE TOWARD THE WORLD OF WORK

STURGEON C. H. S.

Spring, 1982, 1983 and 1984

	1982 N=32 Mean	%ile	1983 N=27 Mean	1984 Sr. Males N=15 Mean	%ile	1984 Sr. Females N=7 Mean	%ile
Preparation	18.8	72	18.7	18.9	70	18.4	42
Interest	18.6	47	18.6	17.9	10	19.4	35
Diligence	20.9	49	20.1	19.7	15	19.9	12
*Laziness	11.5	60	11.9	12.0	74	9.7	42
Job Security	19.6	87	19.4	19.5	85	18.6	76
Pos. Employer Char.	19.1	92	18.0	18.3	71	17.7	54
Independence	17.4	47	18.3	17.6	25	15.7	15
Money	17.7	70	17.4	17.9	62	15.4	25
Ambition	16.2	61	17.0	16.5	63	14.1	17
*Locus of Control	14.0	72	16.2	15.6	91	14.9	87
Confidence	17.0	36	16.9	17.1	20	15.6	8
*Neg. Employer Char.	15.8	77	15.5	16.1	79	15.1	67
Social Relations	19.4	61	18.7	17.9	18	18.1	12
Unemployment	17.1	79	17.3	17.3	64	16.1	70
General	18.4	74	17.4	17.7	51	17.7	31

Note:

1. Grade 10 percentile norms were used for 1982 and 1984.
2. 1982 percentiles are combined male and female percentiles.
3. For subjects indicated thus (*), increasing scores indicate more negative attitudes.

TABLE 5.8

School Subjects, Attitude Scales

Mean Scores by Year, School, and Subject

Leduc

Subject	1982 Eval.	1982 Usef.	1982 Diff.	1983 Eval.	1983 Usef.	1983 Diff.	1984 Eval.	1984 Usef.	1984 Diff.
Career Planning	23.9	24.8	23.6	30.0	29.5	25.8	29.9	31.7	23.5
Modern Living	23.6	24.0	23.5	28.5	30.0	26.1	31.0	32.2	23.3
Occupations	24.3	25.3	25.1	29.7	30.6	25.4	28.7	30.8	24.6
Lang. Arts	24.0	25.3	24.1	24.6	25.9	23.6	27.9	31.3	24.3
Math.	24.0	25.9	24.1						
Recreation	24.3	25.2	23.7						
		N=54			N=41			N=37	

Warburg

Career Planning	23.2	26.5	24.9	29.9	31.1	26.1	25.8	31.3	25.3
Modern Living							25.3	26.7	26.5
Occupations				35.2	34.5	27.1	28.0	31.0	24.4
Math.	23.7	25.8	25.6	22.7	32.4	20.8			
Recreation	24.6	26.6	25.2				31.1	30.4	24.8
Lang. Arts	23.1	25.4	24.5						
		N=20			N=17			N=16	

Namao

Lang. Arts	24.1	24.8	24.5	22.1	28.4	24.1	27.2	35.7	24.3
Math.	24.0	25.4	24.9	26.6	32.3	24.3	27.8	34.7	25.4
Ind. Arts				33.6	33.3	28.4	34.4	34.5	29.7
Home Ec.				35.0	31.8	28.5	34.3	35.9	29.6
		N=47			N=46:1.A=29,H.E.=17			N=20,1.A.=11,	H.E.=9

Sturgeon

Occupations				20.6	26.9	27.1			
Math.	23.9	24.7	24.1	28.7	34.8	24.0	24.8	32.4	24.7
Reading				25.3	33.0	27.4			
Eng. 13 (Lang)	24.5	25.1	24.5				23.2	31.7	24.7
		N=43			N=28			N=34	

5.3.6 Self Concept Outcome

Results of the How I See Myself Scale (see Table 5.9), for measuring self concept showed some differences. Leduc students were generally highest, followed by Namao and Sturgeon. Warburg students showed the lowest self concept score in all instances with one exception. The score for the Namao group was slightly lower in 1983.

Reasons for the differences are a matter of speculation, but it is interesting to note that in Leduc, the only centre where the A-O students were housed separately, the self concept scores were highest. The lowest occurred in Warburg, where the students were most integrated with regular students.

5.3.7 Attendance Outcome

It is difficult to make firm statements regarding attendance because of the many extraneous variables involved. Figures for all of the schools appeared low, especially in part A of Table 5.10. This is largely because many of the students entered the program late, in their first year, or left early, in their last year. Part B is a better representation of attendance in that calculations were based on attendance figures only for those students who attended for the full year. Several students registered late in the A-O program in 1981, and others withdrew early in 1984 to take jobs. Attendance figures for these students were not included in the calculations. A further complication was that Leduc county set aside about eight inservice days for A-O teachers per year when students were not in attendance. There were no such days in Sturgeon School Division.

Individual records show that a few students were poor attenders.

5.3.8 Outcomes for Student and Parent Questionnaires

Tables 5.11, 5.12, 5.13 and 5.14 summarize the responses to the questionnaires showing attitudes toward the special programs.

The means suggest that students and parents in Leduc county are more favorably disposed toward the special programs than are the same groups in the Sturgeon School Division. It must be noted immediately, however, that all groups have positive attitudes, and further, that comparatively few parents bothered to respond to the questionnaire.

The item analyses indicate generally positive attitudes to each of the areas, with one exception. Responses to item 3 suggest that a number of parents feel the program needs revision. It is interesting to note that in both Leduc County and Sturgeon School Division the opinions went from slightly negative to positive. In Sturgeon, the change came in 1983, subsequent to the program changes that were introduced in 1982-83. In Leduc County an improvement in attitude came after 1983. While there was no

TABLE 5.9

How I See Myself Scale

Means and S.D.'s by School, Year and Level

School	1982 N	1982 Mean	1982 S.D.	1983 N	1983 Mean	1984 N	1984 Mean	1984 S.D.
Leduc Total	50	126.5	22.4	50	129.6	46	138.0	19.2
Group T,1,2,3	27	129.0	16.1			31	138.2	20.9
Group 4,5,6	23	123.6	29.2			13	137.5	15.4
Warburg	16	116.8	16.4	17	125.7	16	120.2	13.9
Age 13,14,15	2	106.0	11.3			6	123.0	17.2
Age 16,17,18	14	118.4	16.7			10	118.5	12.1
Namao (Jr.H)	46	129.2	13.9	48	123.4	51	130.1	17.1
Sturgeon (Sr.H.)	52	122.2	31.3	28	134.3	30	129.5	16.4

TABLE 5.10

Average Attendance by School and Year

A. Total Group

School	1982 N	1982 Mean	1982 S.D.	1983 N	1983 Mean	1983 S.D.	1984 N	1984 Mean	1984 S.D.
Leduc	77	131.5	39.0	48	141.8	42.0	49	152.2	34.0
Warburg	22	144.6	30.5	19	167.1	24.9	19	162.8	42.4
Namao/Stur.	89	148.4	38.3	48	164.8	23.7	52	167.8	22.5

B. Continuing Students, 1982, 1983, 1984

Leduc	18	154.0	14.7	19	164.7	9.3	18	168.1	10.1
Warburg	9	154.4	11.5	10	160.4	23.6	6	170.0	9.0
Namao/Stur.	14	160.0	14.8	14	168.3	11.8	--	-----	----

Note 1. Means in part A, representing total groups, are depressed because of the students who attended for only part of a year. The figures in part B, for continuing students, are more accurate because they were based on attendance figures for students who completed the whole term. That is, attendance for students who were admitted to the program late in 1981, and for students who left the program early in 1984, were not included in the calculations. This accounts for the varying number of cases each year.

2. Comparisons must be made with caution because the total possible attendance was different for the two school systems. In particular, possible attendance for A-O students in Leduc county was reduced by 9 days because of inservice, and similar activities.

3. Figures for Namao/Sturgeon for 1984 were not available.

TABLE 5.11

Mean Scores on Student Questionnaire

by School and Year

	1982		1983		1984	
School	N	Mean	N	Mean	N	Mean
Leduc	50	88.0	45	86.7	47	91.9
Warburg	16	97.4	14	93.0	--	----
Namao	46	76.9	47	83.4	44	88.6
Sturgeon	52	83.8	27	84.7	33	81.8

Note 1. Data for Warburg, 1984, are not available.
2. Maximum score possible = 130.
3. Minimum score possible = 26.
4. A score of 78.0 indicates a neutral attitude.
5. Scores above 78 indicate a positive attitude.
6. Scores below 78 indicate a negative attitude.

Table 5.12

Mean Scores for Student Questionnaire Items

By School and Year

Item	Leduc '82	Leduc '83	Leduc '84	Warburg '82	Warburg '83	Namao '82	Namao '83	Namao '84	Sturgeon '82	Sturgeon '83	Sturgeon '84
N =	50	45	47	16	14	46	47	44	52	27	33
1	3.6	3.5	3.8	4.3	4.1	3.6	3.9	4.0	3.2	3.7	3.1
2	2.8	2.8	3.3	3.5	3.1	2.6	2.9	3.1	2.4	2.9	2.6
3	3.4	3.6	3.7	3.9	3.9	3.6	3.3	3.4	3.6	3.5	3.5
4	3.0	3.0	3.1	3.3	2.9	3.2	2.7	3.1	3.0	3.1	2.6
5	3.3	3.6	3.4	3.8	3.6	3.2	3.2	3.6	3.8	3.9	3.4
6	3.9	3.7	3.6	4.1	3.5	3.3	3.7	3.6	3.8	3.7	3.6
7	3.5	3.5	3.8	3.6	3.7	3.6	3.5	3.7	3.5	3.4	3.4
8	3.9	3.8	3.9	4.0	4.1	3.2	3.0	3.0	3.2	3.0	3.2
9	2.9	3.0	3.3	3.3	3.4	2.7	3.0	3.4	2.5	2.7	2.6
10	3.4	3.4	3.6	4.1	3.5	3.6	3.5	4.3	3.4	3.0	3.1
11	3.3	3.5	4.0	4.2	3.9	3.5	3.3	3.5	3.1	3.3	3.3
12	3.2	3.3	3.5	3.5	3.6	3.1	3.0	2.6	2.5	3.1	2.9
13	3.6	3.4	3.7	3.8	4.1	3.2	3.5	3.4	3.7	3.6	3.5
14	3.7	3.4	3.3	3.6	3.5	3.3	3.7	3.6	3.6	3.7	3.4
15	2.9	3.2	3.0	3.3	2.6	3.0	2.8	3.3	2.8	3.2	2.8
16	3.7	3.7	3.8	4.2	4.1	3.3	3.1	3.0	3.3	3.2	3.5
17	3.4	3.5	3.8	3.8	4.1	3.4	3.2	3.5	3.1	3.4	2.9
18	3.0	3.0	3.1	3.4	3.3	2.8	2.7	2.9	2.9	2.7	2.6
19	2.9	3.1	3.2	3.5	3.6	3.0	2.9	3.3	2.9	2.9	2.6
20	3.5	3.5	3.6	4.1	3.9	3.2	3.4	3.9	3.6	3.3	2.9
21	4.0	3.7	3.6	3.9	3.9	3.8	3.7	3.8	3.8	3.8	3.8
22	3.9	3.6	3.8	4.1	3.6	3.2	3.0	3.1	3.3	3.0	3.5
23	3.0	3.2	3.5	3.9	3.6	3.2	3.0	3.8	3.3	3.3	3.1
24	3.7	3.2	3.4	4.0	3.4	3.1	3.3	3.5	2.7	2.8	2.7
25	3.3	3.4	3.6	3.5	3.6	3.4	3.5	3.5	3.5	3.6	3.6
26	3.3	3.1	3.7	3.2	3.0	3.4	3.5	3.3	3.4	3.2	3.4

Note 1: Data for Warburg, 1984, are not available.
2: A score of 3.0 indicates a neutral attitude.
3: Maximum score possible = 5, minimum = 1.
4: High score indicates a positive attitude, low scores a negative attitude.

TABLE 5.13

Mean Scores on Parent Questionnaire

by School and Year

School	1982 N	1982 Mean	1983 N	1983 Mean	1984 N	1984 Mean
Leduc	30	43.9	9	41.2	-	--
Warburg	23	47.8	5	47.4	-	--
Leduc/Warburg	53	45.6	14	43.4	18	48.9
Namao	8	47.2	12	47.9	-	--
Sturgeon	6	43.9	6	42.6	-	--
Namao/Sturgeon	14	45.8	18	46.1	11	47.1

Note 1. For 1984, data were collapsed owing to the low number of questionnaires returned.
2. Maximum score possible = 60.
3. Minimum score possible = 12.
4. A score of 36 indicates a neutral attitude.
5. A score above 36 indicates a positive attitude.
6. A score below 36 indicates a negative attitude.

TABLE 5.14

Mean Scores for Parent Questionnaire Items

By School Jurisdiction and Year

Item	Leduc County '82	'83	'84	Sturgeon School Div. '82	'83	'84
N =	53	14	18	14	18	11
1	4.7	4.1	4.9	4.4	4.4	4.7
2	4.0	3.6	4.5	4.1	4.1	4.4
3	2.5	2.3	3.3	2.2	3.2	3.3
4	3.8	4.1	3.9	3.9	3.9	4.2
5	3.9	4.1	4.5	4.1	4.0	4.0
6	3.5	3.9	3.7	3.6	3.6	3.5
7	3.7	3.5	3.8	3.9	3.8	3.9
8	3.7	3.2	4.2	4.4	3.4	4.2
9	3.4	3.9	3.7	3.4	3.6	3.6
10	3.7	3.8	3.9	3.7	4.0	3.5
11	3.9	3.4	3.9	3.6	4.1	3.4
12	4.6	3.8	4.7	4.4	4.1	4.5

Note 1. A score of 3.0 indicates a neutral attitude.
2. A score above 3.0 indicates a positive attitude.
3. A score below 3.0 indicates a negative attitude.

actual revision in the program, there was an improvement in the operation of the program as it matured and became established.

5.3.9 Discipline

A study of discipline with respect to the A-O program in Leduc county was rather incidental. No measures were taken regarding frequency of problems in this area, instead, impressions were gathered through observations and through discussions with the teaching staffs.

Discipline in a school is usually considered to be a problem when unruly behavior of the students interferes with the teaching and learning that is supposed to take place. In this sense there was no real problem at Leduc nor at Warburg. In the first year of the evaluation, 1981-82, observation of classes indicated that there were times when attention in a few classes was less than ideal because of the behavior of a few students who distracted the others. This was not evident in the final two years of the evaluation. While the problem was never serious, it seemed to disappear.

There were instances of individual students misbehaving. These were handled without major disruptions occurring. The "Homeroom Concept" that was employed seemed to have a stabilizing influence. The homeroom teacher took responsibility for dealing with an unruly student regardless of where the undesirable behavior occurred. For example, if a student misbehaved in a shop class, he would be referred to the student's homeroom teacher for disciplinary action.

A list of offenses, minor and major, with the consequences of each, had been drawn up and made known to the students. For example, minor offenses, usually verbal in nature, resulted in a "job jar" type of punishment. A fourth occurrence of a major offence, such as throwing objects, or defying authority, led to notification of parents. Missing homework was in a category by itself, with clearly stated consequences.

One of the factors contributing to the generally good discipline and the overall feeling of mutual respect between teachers and students was the set of rules or "understandings" that were made clear to the students. Brief and clear statements of expectations were frequently found posted on bulletin boards. For example, one set of rules, clearly emphasized and consistently enforced by teachers, was as follows:

Show up on time.

Be prepared.

Do your assignments.

Respect your own and others' lifespace.

5.4 STANDARDS

5.4.1 Selection Procedures

Criteria for selecting students for the Namao Improvement Program are given in the policy pamphlet (1977) on page 4. They are as follows:

1. For Year I entry age is 13 years and for Year II it is 14 years as of September 1 in both instances. Exceptions may be made where circumstances warrant.

2. An IQ of 80 to 90, as measured by the WISC or the Stanford Binet Intelligence Scale is required, and the measure must have been made within a year prior to the proposed entry date.

3. An education deficiency, after seven or more years of schooling, as determined by the CTBS or other such achievement tests, must be present according to the following minima:

Age in Years	Underachievement in grade equivalents
13.0	1.8
13.5	1.9
14.0	2.0
14.5	2.1

Under the heading "Admission Procedures" (c. 1979, p.6), it is implied that immediate entry may be refused if accommodation is limited, and that a history of poor attendance may reduce the likelihood of an applicant being admitted.

In addition, there are procedural requirements, such as a referral submitted on a proper form, signed application by parents, completed assessment reports, etc.

Criteria for admission to the Academic Occupations Program at Sturgeon Composite High School are stated below; however, it is noted that a student must meet "some or all" of the criteria (Special Program Guide, 1984, p.4):

1. Average or higher intelligence as measured by an individually administered instrument.

2. Over two years behind the age-related progress in school in at least one of the following areas - English/Language Arts, Mathematics.

3. By September 1st of the entering school year:

   at least 14 years of age for Year One at Namao;

   at least 15 years of age for Year Two at SCHS;

   at least 16 years of age for Year Three.

4. Has repeated at least one year of schooling.

5. As recommended for the Program by the principal of the present or previous school.

6. Has the written consent for placement of the home after meeting with school and Program personnel.

7. The approval of the Director of Pupil Personnel for the School Division.

5.4.2 Staff Characteristics

At the Namao Junior High School, and at Sturgeon Composite High School criteria for selecting teachers were as follows:

A background in special education.

Realistic view of achievement levels of students in the Improvement Program and the A-O Program.

A demonstrated technique of good classroom management, especially with respect to flexibility.

5.4.3 Programs and Special Arrangements Employed

As might be expected the Improvement Program and the A-O Program required that special programs be developed, special materials and equipment be acquired, and that special arrangements be made beyond what was required for regular students.

For the Improvement Program and for the A-O program, perhaps the largest single endeavor was constructing the special courses. All of the Improvement Program courses were locally developed, and for the A-O Program, most of the courses numbered 15 (eg. Building Construction 15) were built by staff members.

Another major action for the benefit of the students in the special programs was the acquisition of three Apple II computers and appropriate software. Programs available include spelling drills, mathematics instruction, and language arts exercises.

Other arrangements were, individually, of a minor nature, but each had its effect on the program. The list below gives most of the remaining provisions made especially for the A-O and Im-

provement programs.

Staff - four full time teachers are involved with the Improvement and A-O programs at the junior high school level, and two at the high school level.

Homeroom concept - one teacher delivers all the academic instruction to a student, and in addition, takes responsibility for the student in the vocationally oriented classes.

Smaller classes - official policy is for special program classes to consist of approximately 18 student in the academic subjects and to have a maximum of 15 students in the shop courses. Regular classes in the schools have enrollments of approximately 25 students.

Special courses - most of the courses taken by students in the Improvement program and the A-O programs have been built especially to meet the needs of students.

Preference - A-O students are given preference over regular students in industrial courses if all students who wish to take these courses cannot be accommodated.

Courses developed or adapted for use in the Improvement Program resembled regular courses in many aspects. The names remained unchanged, and the content was remedial in nature. The proposal (1983) described the program for year one of the junior high school program as follows:

> All courses are based on Junior High School programs and regulations. None carry high school credits. The academic course content emphasizes remediation in mathematics and communication skills. Small class size (14) and specialized instruction provide opportunity for academic upgrading.

The academic courses are listed as Language Arts, Reading, Mathematics, Science and Social Studies.

A similar situation exists in the A-O program at the high school level, with some of the courses being regular courses, English 13, for example. Other courses have been developed according to Alberta Education guidelines and have been accepted for high school credit. Courses such as Fashions and Furnishings 15 fall in this category.

5.4.4 Outcomes

Standards of outcomes with respect to academic achievement, attitudes toward the world of work, attitudes toward school subjects, attendance, self concept and attitudes toward the program, as represented by the Namao/Sturgeon classes, were included with the outcomes for Leduc county. The figures are in the tables

presented in sections 5.3.4, 5.3.5, 5.3.6, 5.3.7 and 5.3.8 of this report. The purpose of this was to facilitate comparisons.

5.4.5 Discipline

Discipline was not a problem in the Namao/Sturgeon classes. The homeroom concept was employed at these centres also, with results similar to those in Leduc county. There were perhaps a few more instances of classes becoming unruly enough to have a detrimental effect on the teaching and learning, but there was certainly no persistent problem in this area. The matter of discipline was more informal than at Leduc, in the sense that the expectations were present without special attention being drawn to them.

5.5 JUDGMENTS

5.5.1 Rationale and Intents

The A-O program in Leduc County, and the comparable programs in Sturgeon School Division (Junior High School Improvement Program, and the A-O Program) are based on similar rationales. In Leduc there is more emphasis on the idea of an alternative form of education, while in the Sturgeon schools the stated emphasis is on an eventual return to the main stream of schooling. Both rationales are quite logical in view of the situations. The Leduc program, in catering to both EMH and LD students should have broader objectives, and indeed it does. Success in the program is defined to include graduation from the A-O program, as well as getting a job, returning to regular school, and graduating with a high school diploma. The Namao program does not have a "graduation" from the A-O program, because it is expected that a student will either get a job or stay in high school and graduate. Both programs, then, make good sense with respect their rationales.

5.5.2 Transactions

The Leduc system has made impressive provision with respect to staffing, special programs and special instruction. The Sturgeon system has also, over the years, built a good program. Only during the last year has there been extra funding available for the special program, therefore the extra effort required in program building has been somewhat curtailed. Probably because of the extra funding, Leduc has been able to put more effort into design of courses, procuring special materials, and conducting special activities such as field trips and work experience. The courses in the two schools at Namao resemble regular school courses with respect to content and instructional methods. The emphasis is on academic matters with vocational work in the background.

In the area of transactions, then, the Leduc program must be rated high.

5.5.3 Outcomes

In the area of achievement, a revealed by the CAT battery, the general results are satisfactory. The overall gains experienced by the Leduc classes are adequate. In the past the gain each year has averaged about a half or two thirds of a grade. The gain from spring, 1982 to spring 1984 was at least up to this standard. The Warburg group is different. The "gains" were negative to a large extent. It is possible that outcomes sought in Warburg have strayed from some of those set down in the policy manual. The gains recorded for the students who were in the program for the three years studied also placed the Leduc system in a good light.

Compared to gains in the Sturgeon system, the Leduc gains are at least as good, and they appear to be more consistent. The area of achievement outcomes, therefore, yields a rating of adequate or perhaps better.

With respect to attitudes towards work, there is not much difference between the results from the two programs. The Leduc group has a few more extreme scores in the negative direction than does the Sturgeon group.

Attitudes toward the subjects taken in school are, on the whole, healthy. Bearing in mind that a mean score above 24 represents a positive attitude, while a mean below 24 indicates a negative attitude, the figures are encouraging. For the County of Leduc students there are no means well below 24, and most of them are well above this figure. This indicates generally positive attitudes with respect to the evaluative scale, the usefulness scale, and the difficulty scale.

The figures for the Sturgeon School Division are similar to the Leduc County figures. This indicates that both programs are fostering reasonable healthy attitudes towards school studies.

Discipline in the two systems was comparable. The County of Leduc group had done a better job of informing the students as to what specific behaviors would not be tolerated, and as to the consequences of any breach in discipline. The fact remains, however, that matters of discipline were effectively dealt with in the special programs of both systems.

5.5.4 Conclusion

If an overall rating of the two programs had to be made it would probably favor the one given in Leduc County. This would be largely because the Leduc program seems to have a clearer idea of what the intentions are, and to stick closer in practice to what was intended. A good example of this is found in the discrepancy between objectives and practices in the case of Sturgeon. The rationale states that the emphasis is on returning

students to regular classes, but in actual practice there is considerable emphasis on vocational skills. When, in addition, the success rate in the two systems is considered, it would appear that the Leduc program is the stronger. The Sturgeon program, over the years, seems to have undergone a metamorphosis such that the actual practice is more in keeping with the Leduc rationale. In terms of its own objectives, the Leduc county program seems to be the better of the two.

CHAPTER 6: FINDINGS AND RECOMMENDATIONS

6.1 SUMMARY OF FINDINGS

1. The strength of the A-O program lies primarily in the quality of its teachers. All of them are especially dedicated and enthusiastic. They exhibit a genuine interest in their students, cooperate with one another in matters of teaching, in dealing with problems, and in group activities, and are not reluctant to put extra time and energy into their work.

2. Morale of the staff is excellent. This is in no small part due to the efforts of members of the central office staff and of the administrators in the schools. It is unusual to see administrators and supervisors completely familiar with the program and the facilities, and with the individual characteristics of every student in the program.

3. Considerable effort has gone into building the A-O program, including setting up special courses, assembling necessary materials and equipment, organizing special activities, and placing students in work experience situations.

4. Teachers participate in decision making regarding program development, special projects, requisitioning materials, and teaching procedures. This has made the program more meaningful to the teachers, and has made them more appreciative of its goals and of why the various policies exist.

5. An excellent manual has been prepared for use in Leduc county. The philosophy and goals are clearly stated, and in addition there is a wealth of information with respect to detailed objectives, course content, special materials and instructional activities.

6. There is excellent communication and cooperation between staff members involved with the A-O program at Leduc and at Warburg. This situation is, to a considerable extent, the result of the monthly inservice meetings. These meetings bring together the A-O staff members from Leduc and Warburg, and the central office personnel responsible for the special program.

7. The A-O program has a strong Special Education flavor, in that the interests of the students are paramount, rather than a dominant flavor of passing or failing according to vocational standards. There is evidence that a Special Education emphasis is superior to a vocational emphasis (Gillet, 1981, and Miller & Schloss, 1982).

8. The program seems to be improving, especially with respect to achievement of the students, their attitudes, and classroom atmosphere. The staff members are adapting to their

respective roles in the new program. They are more confident in what they are doing in 1984 than they were in 1981, and this is reflected in smoother running classes.

9. The academic achievement of the students is satisfactory. There is generally a gain of approximately two thirds of a grade level each calendar year. Considering that the students have a history of low achievement, and that they are spending much time in the vocational area, this is a reasonable level of progress.

10. The facilities are satisfactory considering the stage of growth of the program. There has been a steady improvement since the program was begun, and this improvement is expected to continue. In Leduc the disadvantages of having to convey the students to another school for some of the vocational courses are partly offset by the feelings of security and belonging resulting from the A-O students being housed in a separate building somewhat apart from the other buildings. In Warburg, because of the small number of A-O students, they are housed with the regular junior and senior high school students. This arrangement has the advantage of making the school's vocational and technical resources readily available to the A-O students and permitting more efficient deployment of staff.

11. The programs at Leduc and at Warburg are becoming different in character. This applies especially to the type of student being accommodated, the activities being undertaken, and the outcomes with respect to academic achievement.

12. Attitudes toward the A-O program are positive. This applies to the teaching staff, the students, and the parents.

13. Parents have a distinct role to play. They are informed fully of the nature of the program before a student is admitted, they are kept informed of students' progress, they are called upon for assistance when students have unexplained absences and when assignments are neglected, and they are consulted immediately when serious problems develop.

14. There are some problems in using the Sturgeon School Division programs as standards for comparison. The two programs are substantially different.

15. Self concept of the A-O students is at least as good as that of the comparable group in Sturgeon School Division.

16. Average attendance of the students is below what might be expected. It is noted, however, that students' attendance is lowest during their first year in the program and steadily improves as they progress.

17. The County of Leduc A-O program generally compares favorably with the programs in operation in Sturgeon School Division. This applies to program development, achievement standards, attitudes of students and parents, and self concept. Overall attendance seems to be better in the Sturgeon system. It must be remembered that the two school systems developed their programs for different purposes and for students with different sets of problems.

6.2 RECOMMENDATIONS

1. Support by way of funding of the Leduc A-O program should be continued.

2. The program should be allowed to continue in its present form and to grow and evolve so as to meet the changing needs of the students and the changing conditions in the school system. Any movement to make a substantial change should be resisted. Any program, locally developed, that is working well, should not be changed merely for the sake of having to adapt to externally imposed regulations.

3. The Special Education emphasis, mentioned in #7 of the findings listed above, should be preserved. A shift to standards expected of regular students in vocational subjects might well destroy the A-O program as it now exists.

4. While the present monthly inservice meetings are of value, and should definitely be continued, teachers should be encouraged to participate in some inservice education of a more formal nature. Study in the area of dealing with learning disabled students would be particularly useful. The possibility of providing special courses at Leduc by the Department of Educational Psychology of The University of Alberta, should be investigated.

5. A testing program should be organized for the A-O classes to monitor the achievement, attitudes and personality traits of the students.

6. There should be a continuing effort to increase the supply of special materials for the A-O classes. In particular, there should be an increase in the supply of the equipment that is heavily used.

7. In the school located in Leduc city, increased access to automotives shops, business machines, food labs. and the like, is needed. This will probably come if the A-O section becomes housed in the new senior vocational high school. In the Warburg school the small size of the A-O group dictates that any new equipment must be of use to regular students as well as to A-O students.

8. The programs at Warburg and Leduc should be monitored close-

ly in order to determine the extent to which they differ from one another. The causes of the differences and the desirability of the differences, that appear to be increasing as time passes, should be studied.

9. The matter of attendance should be examined with a view to improving the situation during the students' first and second years in the program.

REFERENCES

Alberta Education. The Goals of Basic Education. Communications Branch, Alberta Education, 1978.

County of Leduc. Academic Occupational Program. County of Leduc No. 25, c. 1980.

Gillet, P. Of Work and Worth: Career Education for Exceptional Children and Youth. Salt Lake City: Olympic Pub. Co. 1981.

Gordon, Ira. A Test Manual for the How I See Myself Scale. Gainseville: Florida Educational Research and Development Council, College of Education, 1968.

Maguire, T.O., and Romaniuk, E. Attitudes Toward the World of Work. Alberta Education, 1983.

Maguire, T.O., Romaniuk, E. and MacRury, K.A. Attitudes Toward the World of Work: Development of the Scales and Manual for Administering, Scoring and Interpretation. Planning Services Branch, Alberta Education, 1983.

Miller, S., and Schloss, P. Career Vocational Education for Handicapped Youth. Rockville, Md.: Aspen Systems Corp. 1982.

Nyberg, V.R. and Clarke, S.C.T. School Subjects Attitude Scales: Administrator's Manual. Alberta Education, 1979.

Namao School. Pamphlet describing the Improvement Program. Namao: Namao School, c. 1979.

Stake, R.E. The Countenance of Educational Evaluation. Teachers College Record, 1967, 68, 523-540.

Sturgeon Composite High School. Special Programs Guide, 1984-1985. Namao: Sturgeon Composite High School, 1984.

Sturgeon School Division No. 24. Statement of Objectives and Operational Guidelines for the Divisional Junior High School Improvement Program in Operation at Namao School. Morinville: Sturgeon School Division No. 24, 1974.

Sturgeon School Division No. 24. Statement of Objectives and Operational Guidelines for the Divisional Junior High School Improvement Program in Operation at Namao School. Morinville: Sturgeon School Division No. 24, 1977.

Sturgeon School Division No. 24. Proposed Academic-Occupational Program for the Sturgeon School Division No. 24 to be offered at the Namao Junior High School, Namao and Sturgeon Composite High School, Namao. Morinville: Sturgeon School Division No. 24, 1983.

APPENDIX A

QUESTIONNAIRE FOR STUDENTS and QUESTIONNAIRE FOR PARENTS

QUESTIONNAIRE FOR STUDENTS

You are enrolled in a special program at school that is quite new. We would like you to tell us how you feel about this program by filling in the form on the next page.

Your name should NOT be given on this form, therefore no one will know what you said.

Record your feelings by noting how much you agree or disagree with each statement. This can be done by putting a circle around the number that describes your feeling. Some examples are given below.

	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree
Example A. I like cold, wet weather.	(1)	2	3	4	5
Example B. I like dogs.	1	2	(3)	4	5

In the first example, Example A, the circle around "1" shows that the person disagreed with the statement; that is, he or she did not like cold, wet weather.

In the second example, Example B, the circle around "3" shows that the person neither liked nor disliked dogs; that is, he or she could take them or leave them.

If you have no opinion about a statement, circle the "3".

QUESTIONNAIRE FOR STUDENTS

		strongly disagree	disagree	neither agree nor disagree	agree	strongly agree
1.	I like the school program.	1	2	3	4	5
2.	School is a happy place.	1	2	3	4	5
3.	I get along very well with my teachers.	1	2	3	4	5
4.	Students in class do what the teacher suggests.	1	2	3	4	5
5.	We get along with each other in my class.	1	2	3	4	5
6.	I don't like the students in my class.	1	2	3	4	5
7.	I work hard at my school work.	1	2	3	4	5
8.	I work hard at my work station (Circle 3 if you do not have a work station).	1	2	3	4	5
9.	As time goes on I like school more and more.	1	2	3	4	5
10.	I would learn better if I were in a regular school program.	1	2	3	4	5
11.	The teachers like the students.	1	2	3	4	5
12.	The teachers are not fair to everyone.	1	2	3	4	5
13.	Most students work well together in my class.	1	2	3	4	5
14.	Students don't like each other very much.	1	2	3	4	5
15.	Most of the students do as little work as possible.	1	2	3	4	5
16.	I am learning useful things at my work station.	1	2	3	4	5

		strongly disagree	disagree	neither agree nor disagree	agree	strongly agree
17.	In the school we do only dull and boring things.	1	2	3	4	5
18.	The students don't behave in class.	1	2	3	4	5
19.	Students don't really listen to the teachers.	1	2	3	4	5
20.	I would rather be in another class in this program.	1	2	3	4	5
21.	I find my school work too hard.	1	2	3	4	5
22.	I find my work station too hard (Circle 3 if you have no work station).	1	2	3	4	5
23.	I go to school only because I have to.	1	2	3	4	5
24.	I would be able to handle a regular school program.	1	2	3	4	5
25.	I don't mind doing some homework.	1	2	3	4	5
26.	I would like to be more involved with the activities in the rest of the school.	1	2	3	4	5

QUESTIONNAIRE FOR PARENTS

Your son or daughter is in a school program that is different from most programs. It is quite new and is changed every so often according to what the students need. It is important that the parents tell how they feel about the program.

Please give your feelings about the program by filling out the form on the next page. Your name should NOT be given on the sheet, therefore no one will know what you have said. The forms will be read by a group of people from outside the county. They will make a report that summarizes how all the parents feel. This report will be used by the people who are making changes in the program.

All you need to do is state how much you agree or disagree with each of the statements on the next page. This is done by putting a circle around the number that goes with your feeling. Two examples are given below.

	highly disagree	disagree	neither agree nor disagree	agree	highly agree
A. I like cold, wet weather	(1)	2	3	4	5
B. I like dogs	1	2	(3)	4	5

The circles around the numbers show that the person definitely does NOT like cold, wet weather, and neither likes nor dislikes dogs.

If you have no opinion about a statement circle the "3".

When you have completed the form place it in the envelope provided, seal it, and return it to the school. Please return it before the end of May.

Thank you for your help.

QUESTIONNAIRE FOR PARENTS

	highly disagree	disagree	neither agree nor disagree	agree	highly agree
1. I am glad that a different program is available at school.	1	2	3	4	5
2. My son/daughter is learning useful things at school.	1	2	3	4	5
3. I think the school program needs a lot of improvement.	1	2	3	4	5
4. The teachers don't treat my son/daughter as well as other students are treated.	1	2	3	4	5
5. My son/daughter has good teachers.	1	2	3	4	5
6. My son/daughter has nice friends at school.	1	2	3	4	5
7. Other students are mean to my son/daughter.	1	2	3	4	5
8. I think my son/daughter would learn better in a regular program.	1	2	3	4	5
9. My son/daughter works hard at school.	1	2	3	4	5
10. My son/daughter is learning bad habits at school.	1	2	3	4	5
11. I don't know what my son/daughter is doing at school.	1	2	3	4	5
12. I like the purposes of the program.	1	2	3	4	5

APPENDIX B

A-O INSERVICE ACTIVITIES

A-O INSERVICE ACTIVITIES

A. DISCUSSION TOPICS

1. Characteristics of LD and EMH Adolescents
2. The Dyslogic Child
3. The Use of Contracts
4. Apprenticeship Programs
5. Behavioral Management of Difficult Students
6. Unit and Modular Instruction
7. Drug and Alcohol Abuse
8. Motivation of the Special Needs Students
9. Readability Formulae
10. Teaching of the Basic Reading Skills
11. Measurement and Evaluation of A-O Student Progress
12. Legal Liability and the A-O Teacher
13. The Use of Computers in the A-O Program
14. Metamemory.
15. Social Cognition
16. Role Playing and Simulation
17. Disciplinary Techniques with Barbara Colorossa
18. Motivation of the Special Needs Student

B. WORKSHOPS

1. Materials Construction
2. Curriculum Development
3. Program Evaluation
4. Cataloging Resources
5. Solution Generation for Emergent Problems
6. Case Conferences with Central Office Staff